# Jacob Altholz, MD

### **EDUCATION**

Nellis Air Force Base, Mike O'Callaghan Military Medical Center/Kirk Kerkorian 2021 - Present School of Medicine at University of Las Vegas

**Residency in Emergency Medicine** 

Class of 2024

F. Edward Hébert School of Medicine 2017 - 2021

Uniformed Services University

**Doctor of Medicine (M.D.)** 

Class of 2021

George Mason University/Hong Kong University 2016

Study Abroad via The Fund for American Studies

Asia Institute for Political Economy

University of Colorado, Denver/Anschutz 2012 - 2017

Bachelor of Science (B.S.), Bioengineering with Honors/University Honors

Minors: Economics/Multi-Disciplinary Research Methods

### **AWARDS**

Uniformed Services University of the Health Sciences

Humanitarian Service Ribbon	May 2021
Association of Military Surgeons of the United States (AMSUS) Award	May 2021
ACEP Medical Student Professionalism and Service Award	May 2021
USUHS Medal of Achievement	Feb 2020
Golden Humanism Honor Society Inductee	Feb 2020

University of Colorado, Denver

Undergraduate Peer Leader of the Year, Department of Bioengineering May 2017 Bioengineering Undergraduate of the Year May 2017

Achievement Rewards of College Scientists (ARCS) Scholar Fall 2014 - Spring 2017 Virginia T. Schuman Scholar Fall 2014 - Spring 2017

Apr 2023

Jan 2022 - Dec 2023

### PROFESSIONAL DEVELOPMENT

National Aeronautics and Space Administration (NASA)

## **Aerospace Medicine Clerkship Participant**

Four-week intensive course including formal didactic sessions, tours, and familiarization with facilities at Johnson Space Center, and longitudinal research project presented to Space Medicine Operations community.

Emergency Medicine Residents' Association (EMRA)/American College of Emergency Physicians (ACEP) EMRA and ACEP Health Policy Academy

### **Health Policy Fellow**

Activities in both EMRA and ACEP to include didactic sessions, authoring policy, and participating in various levels of EMRA/ACEP policy activities to

include Reference Committees and Board Resolution Submissions.

Uniformed Services University

Healer's Art Spring 2018

Fifteen-hour course derived from Dr. Rachel Remen's curriculum.

#### PROFESSIONAL SERVICE

National

American Medical Association (AMA)

House of Delegates

Delegate for RFS Nov 2022 – Present

Fully voting member in the House of Delegates, elected by peers.

Residents and Fellow Section (RFS)

Committee on Legislation & Advocacy, ChairAug 2023 – PresentRules Committee MemberJun 2022, 2023DelegateJun 2023Credentialing Committee Member, ChairJun 2023

Reference Committee A Co-Chair

Jun 2023

Emergency Medicine Residents' Association (EMRA)

Bylaws Committee Member May 2023 – Present EMRA/ACEP Health Policy Fellowship Co-Director Jan 2023 – Present

Representative Council

Procedure Committee Representative MemberJun 2023 – PresentProgram RepresentativeOct 2022 – Present

Reference Committee Chair Mar 2022

American College of Emergency Physicians (ACEP)

Nevada ACEP Board of Directors (NVACEP) Resident Member Jan 2022 – Present

Represent residents to NVACEP and represent Nevada to ACEP/Congress.

Government Services Chapter PR/Advocacy Committee Member May 2021 – Present

Advise regarding policy as it relates to the chapter. Collect, write, and prepare content for the GSACEP seasonal newsletter to all members.

ACEP Council

Delegate (Nevada) Oct 2023

Vote/participate in the policy-making body of ACEP

Gold Humanism Honor Society

Alternate Delegate (EMRA)

Humanism in Action Committee Member Oct 2022 – May 2023

Oct 2022

Committee dedicated to furthering compassionate care on a national level

Association of American Medical Colleges (AAMC)

Organization of Student Representatives (OSR)

National Delegate for Medical Education Nov 2018 – Nov 2020 Northeastern Regional Chair May 2020 – Nov 2020

Represent all students specifically regarding medical education to the AAMC and oversee the medical education student committee.

## M3/M4 COVID Work Group Member

Apr 2020 - Nov 2020

Represent M3 and M4 students during the COVID pandemic.

## Group on Educational Affairs (GEA) Undergraduate Medical Education (UME) Steering Committee Member

Mar 2019 - Nov 2020

Represent students on the committee dedicated to undergraduate academic medicine. Member of First-Generation Student Toolkit Subcommittee.

### Local

Kirk Kerkorian School of Medicine at the University of Las Vegas

Department of Emergency Medicine

**Chief Resident** Appointed Chief, specifically regarding administration/scheduling. Highly

involved position of coordination/direction and representing residents.

Golden Humanism Honor Society/Outreach Committee Resident Member Fall 2021 - Present

First active resident member and founder of resident initiative. Leading the development of a Resident Chapter and advising the student members in tandem with the Faculty Sponsors and coordinating cross-hospital outreach efforts.

EM Diversity, Inclusion, and Equity/Outreach Committee Member/Chair Firstly member, subsequently chair of the committee coordinating outreach efforts for the EM residency to include coordination with local non-profits. Leading curriculum and lecture series regarding health disparities and medical iustice.

Nevada Clinicians for Climate Action

**Founding Member** 

Represent clinicians concerned about health effects of climate change to local/state government in addition to coordination with other advocates.

Uniformed Services University

**Executive Curriculum Committee Member** 

Student representative on core curriculum committee overseeing six subcommittees.

**Student Advisory Committee Member** 

Represent the medical students of the School of Medicine to the Dean and

President.

Student Government

Academic Representative

Extremely involved position. Served as liaison and advocate for class in all academic concerns to faculty and administration.

Advisor to the Chair for Pre-Clerkship Dean Selection Committee

**Pre-Clerkship Curriculum Committee Member** 

Oct 2017 - Dec 2018

Represented students on curriculum development/assessment team dedicated to the pre-clerkship timeframe.

Mar 2023 - Present

Fall 2021 - Present

Mar 2023 - Present

May 2020 – May 2021

Oct 2017 - May 2021

Oct 2017 - May 2021

2020

### **USUHS Air Force Squadron Element Leader**

Oct 2017 - Dec 2018

Oversaw five Air Force colleagues for accountability and standards.

University of Colorado, Denver/Anschutz

**ABED Accreditation Committee Alumni Member** 

Engineering accreditation committee of all stakeholder groups.

Fall 2017 - Present

Fall 2015 - Spring 2017

Fall 2012 – Spring 2017

#### **TEACHING EXPERIENCE**

University of Colorado, Denver/Anschutz

## Organic Chemistry Laboratory I & II Teaching Assistant

Taught, coordinated, and maintained entire lab sections independently and administered all grades therein; 1-2 sections per semester, 7 hours per week per section, 20 learners per section.

Excel Learning Center

All Subjects

### Teacher/Tutor

Tutored and taught summer classes for all high school major sciences, mathematics, and English classes. 3 hours per session, 3 sessions a week. Summer classes may include up to 20 students, full courses including biology, chemistry, calculus, and ACT/SAT preparation, 5 days a week for 6 hours.

RESEARCH EXPERIENCE

National Aeronautics and Space Administration (NASA)

**Space Medicine Operations** 

Researcher - Spaceflight-Associated Neuro-ocular Syndrome Coalition

Examine the effect of spaceflight on visual refractive error and Spaceflight-Associated Neuro-ocular Syndrome (SANS), working to comprehensively analyze available astronaut data and elucidate possible mechanisms

- Mentors: Dr. Tyson Brunsetter; manuscript in writing.

Apr 2023 – Present

Uniformed Services University

STudent Omnibus Military Physician Survey (STOMPS)

Investigator

Examine the current attitude, practice, and culture of military physicians regarding the ethical identity conflict arising from dual agency of the medical and military professions

- Mentors: Dr. Francesca Cimino

Long-Term Career Outcomes Study

**Research Assistant** 

Organized and conducted research relating to the long-term trajectory of medical students from the military medical school in Bethesda, MD; specifically researched the concept of grit within medical students including longitudinal

measurement among four classes and statistical analysis therein.

- Mentors: Dr. Ting Dong, Dr. Steve Durning; research published

Spring 2020 – Spring 2021

Fall 2018 - Fall 2020

Investigator Fall 2017 – Fall 2020

Organized, designed, and conducted a novel learner feedback method that prioritizes student consensus; compiled and presented reports of the results of said method to relevant leadership, administration, and committees; described the method in poster sessions and am working to publish the method for broader use in the academic community.

- Mentor: Dr. Holly Meyer

### New York University

Department of Neuroscience

### Research Assistant - Pelli Lab

Researched the psychophysics of vision including object recognition, crowding, and visual noise; researched the fundamental aspects of awe and pleasure as it related to personally-identified beauty; funded by a Summer Undergraduate Research Grant by the NSF.

May 2015 - Aug 2015

## University of Colorado, Denver/Anschutz

Department of Cardiothoracic Surgery

#### Research Assistant - Hunter Lab

Managed mechanical testing lab - performed mechanical tests on soft tissue; trained students to use testing equipment; kept lab supplies at appropriate levels; worked with Biosafety to remove lab wastes. Lab worked with human, cow, and rat arterial tissues to improve understanding of how vascular stiffness changes with vascular disease.

Aug 2015 - May 2017

#### Department of Bioengineering

#### Lab Manager/Junior & Senior Design

Assisted in the development of the design, documentation, and protocols related to an open-source 3D bioprinter; managed and maintained cell and tissue engineering teaching/research lab; managed and maintained 3D printing laboratory.

Senior Engineering Project: "3D Printing of Cell-laden Cross-linked Collagen Scaffolds"

Jan 2016 - May 2017

#### Department of Bioengineering

### Research Assistant - Weir Lab

Researched and designed improvements upon upper-extremity robotic prostheses via rapid prototyping; utilized 3D printing in plastic and various metals to assess these designs.

- Research Published

### Mar 2014 - Dec 2015

### **CONFERENCE PRESENTATIONS/POSTERS**

### National

- **1. Altholz J.** *How to Write a Resolution.* Presentation at ACEP's Leadership and Advocacy Conference. Washington D.C. May 2023.
- **2. Altholz J.**, Beltran N, Domanski K., Mannina L., Sanson T. *Creating a Climate of Inclusiveness*. Panel presentation at ACOEP Scientific Assembly. Las Vegas, NV. Oct. 2022.
- 3. Altholz J. Learners Leading Learners: The Student Programming Showcase. Session Presentation Accepted at Learn, Serve, Lead: The AAMC Annual Meeting. Washington D.C. Nov 2020. (Conference held virtually; session cancelled.)

**4.** Mason HRC, **Altholz J**, Buchanan A, Casillas A, Coplit L, Nguyen M, Sapp V, Uchida T. *Promoting first generation college graduate success in medical school: An online toolkit of resources.* Session Presentation Accepted at Learn, Serve, Lead: The AAMC Annual Meeting. Washington D.C. Nov 2020. (Conference held virtually; session changed to poster.)

- **5. Altholz J**, Barron T, Charny G. *Constipation as a Chief Complaint for Primary Myelofibrosis in a Young, Active-Duty Patient.* Poster Presentation Accepted at the Joint Services Symposium on Emergency Medicine. San Antonio, TX. Sep 2020. (Conference moved to virtual format.)
- 6. Uchida T, Sapp VT, Nguyen M, Mason HRC, Coplit L, Casillas A, Buchanan A, Altholz J. Promoting first generation college graduate success in medical school: An online toolkit of resources. Workshop Presentation Accepted for International Association of Medical Science Educators Annual Meeting. Denver, CO. Jun 2020. (Conference canceled; poster presented online.)
- Mason HRC, Nguyen M, Altholz J, Casillas A, Buchanan A, Coplit L, Sapp V, Uchida T. Promoting first generation college graduate success in medical school: An online toolkit of resources. Workshop Poster Accepted for AAMC: Group on Diversity and Inclusion Professional Development Conference. Miami, FL. May 2020. (Conference canceled.)
- **8.** Ursua F, **Altholz J**, Durning S, Torre D, Dong T. *Once in the Door, Grit May Matter More: An Evaluation of Grit in Medical Students*. Paper Presentation at the American Educational Research Association Annual Meeting. San Francisco, CA. Apr 2020. (Conference canceled.)
- Mason H, Altholz J, Buchanan A, Casillas A, Coplit L, Nguyen M, Sapp V, Uchida T. Promoting first generation college graduate success in medical school: An online toolkit of resources. Workshop Poster Accepted for AAMC: GSA/CiM/OSR Professional Development Conference. Chicago, IL. Mar 2020. (Conference canceled.)
- **10. Altholz J.** *Learners Leading Learners: The Student Programming Showcase.* Session Presentation at Learn, Serve, Lead: The AAMC Annual Meeting. Phoenix, AZ. Nov 2019.
- **11. Altholz J,** Naha U, Witt A. (All presenters contributed equally.) *Transition to Residency: Director's Perspective.* Workshop Presentation at Learn, Serve, Lead: The AAMC Annual Meeting. Nov 2019.
- **12. Altholz J**, Meyer E, Meyer H. "Racking and Stacking Course Evaluations: An easy-to-use collaborative approach that hones in on student consensus." Poster Presentation at Learn, Serve, Lead: The AAMC Annual Meeting. Austin, TX. Nov 2018.
- **13.** *Liberty and Equality Seminar.* Invited Participant. Socratic conference which invited and financially supported previous TFAS participants to Washington D.C. Feb 2017.

### Regional

- 1. Altholz J. Sexual and Gender Minority Health in the Emergency Department. Presentation at the Southwest Regional Emergency Medicine Conference. Las Vegas, NV. Jan 2023.
- 2. Mason HRC, Altholz J, Colpit L, Nguyen M, Sapp VT. *Promoting first generation college graduate success in medical school: An online toolkit of resources*. Workshop Presentation Accepted for AAMC: Northeast Group on Educational Affairs Conference. Burlington, VT. Apr 2020. (Conference canceled.)
- 3. Altholz J, Meyer E, Meyer H. Racking and Stacking Course Evaluations: An easy-to-use collaborative approach that hones in on student consensus. Poster Presentation at AAMC NEGSA/NEOSR Regional Conference. Boston, MA. Apr 2019.

#### Local

- 1. Altholz J. et al. Effect of Spaceflight on Refractive Error & Axial Length: Implications for Spaceflight Associated Neuro-Ocular Syndrome (SANS). Poster Presentation at Aerospace Medicine Clerkship Open Forum Poster Presentations. Johnson Space Center, Houston, TX. Apr 2023.
- **2. Altholz J**, Leovy J. *Transportation Emissions and Our Health*. Presentation to Clean Cities Coalition of Las Vegas, Las Vegas, NV. Mar 2022.
- Altholz J, Leovy J. Heat and Our Health. Presentation to Sierra Club of Las Vegas. Las Vegas, NV. Feb 2022.

**4. Altholz J**. How distance modulates the effect of noise on letter recognition. Presentation at the Symposium of the Summer Undergraduate Research Program of the Center for Neural Science. New York City, NY. Jul 2015.

- **5. Altholz J**, Blauch N. *Using noise to study letter identification: Evidence for four types of spatial interaction.* Poster Presentation at NYU Diversity Conference. New York City, NY. Jul 2015.
- **6. Altholz J**, Huddle S, Weir R. *Development of a Clutch Mechanism to Combat Prosthetic Backdrivability.* Poster Presentation at CU Denver: Research and Creative Activities Symposium. Denver, Colorado. Apr 2015.

### PEER-REVIEWED PUBLICATIONS

- Altholz J. (Aug 2023) PEN-FAST 2.0 Directly Testing for PCN Allergy The PALACE RCT. Blogpost on *JournalFeed*. <a href="https://journalfeed.org/article-a-day/2023/pen-fast-2-0-directly-testing-for-pcn-allergy-the-palace-rct/">https://journalfeed.org/article-a-day/2023/pen-fast-2-0-directly-testing-for-pcn-allergy-the-palace-rct/</a>
- 2. Altholz J. (Oct 2022) Quality Versus Comfort: Does Tegaderm Get in the Way of Ocular Ultrasound? Blogpost on *JournalFeed*. <a href="https://journalfeed.org/article-a-day/2022/quality-versus-comfort-does-tegaderm-get-in-the-way-of-ocular-ultrasound/">https://journalfeed.org/article-a-day/2022/quality-versus-comfort-does-tegaderm-get-in-the-way-of-ocular-ultrasound/</a>
- Altholz J. (Sept 2022) Raising the Bar on Neonatal Hyperbilirubinemia Care. Blogpost on JournalFeed. <a href="https://journalfeed.org/article-a-day/2022/raising-the-bar-on-neonatal-hyperbilirubinemia-care/">https://journalfeed.org/article-a-day/2022/raising-the-bar-on-neonatal-hyperbilirubinemia-care/</a>
- Ursua, F, Altholz J, Durning SJ, Torre D, Schreiber-Gregory D, Dong T. (2020). Once in the Door, Grit May Matter More: An Evaluation of Grit in Medical Students. *Military Medicine*. <a href="https://doi.org/10.1093/milmed/usaa297">https://doi.org/10.1093/milmed/usaa297</a>
- Chan A, Altholz J, Weir R, Davidson M. (2020). A Novel Nickel-Titanium Actuator in a Prosthetic Motor Clutch. Accepted to *Journal of Young Investigators*, 38(3), 18-23. <a href="https://doi.org/10.22186/jyi.38.3.18-23">https://doi.org/10.22186/jyi.38.3.18-23</a>

#### OTHER PUBLICATIONS/PODCASTS

- **1. Altholz J**, Huang E, Schafer, J. (2023) Chapter 10: "New" Methods to Control Health Care Costs. In: *Emergency Medicine Advocacy Handbook*. 6<sup>th</sup> edition.
- **2. Altholz J.** (2023) Spotlight on: Health Policy Academy Fellow Jacob Altholz, MD. *EMResident*. https://www.emra.org/emresident/article/health-policy-academy-fellow-jacob-altholz
- **3. Altholz J,** (2022) Reflections from the ACEP 2022 Leadership & Advocacy Conference. *ACEPNow*. <a href="https://www.acepnow.com/article/acep-2022-leadership-advocacy-conference/3/">https://www.acepnow.com/article/acep-2022-leadership-advocacy-conference/3/</a>
- **4. Altholz J**, Stanton R. (2022) Guest on Podcast *ACEP Now: Stop... Advocate and Listen The ACEP LAC Experience*. <a href="https://soundcloud.com/acep-frontline/acep-frontline-stop-advocate-and-listen-the-lac-experience">https://soundcloud.com/acep-frontline/acep-frontline-stop-advocate-and-listen-the-lac-experience</a>
- 5. Coplit L, Altholz J. (2020) Learning Environment Resources within First-Generation College Graduates in Medical School Toolkit of Resources for Medical Schools. Association of American Medical Colleges. Student Link: <a href="https://www.aamc.org/professional-development/affinity-groups/gea/first-generation-students">https://www.aamc.org/professional-development/affinity-groups/gea/advisors-first-generation-medical-school-students</a>
- 6. Altholz J. (2020) Novel: A Short Story. Progress Notes. http://progressnotesjournal.wixsite.com/home

### TRAININGS/CERTIFICATIONS

Basic Life Support (BLS)
Advanced Life Support (ALS)
Advanced Trauma Life Support (ATLS)
Aerospace Medicine Primary Course 101 – Jun 2018
Healer's Art – Spring 2018
Commissioned Officer Training – Jul 2017

### **LANGUAGES**

English – Native Language Spanish – Speak, read, write with basic competence

### **MEMBERSHIPS**

GLMA: Health Professionals Advancing LGBTQ Equality	2023 – Present
Association of Military Surgeons of the United States	2021 - Present
Gold Humanism Honor Society	2020 - Present
American College of Emergency Physicians	2020 - Present
Emergency Medicine Residents' Association	2020 - Present
American Medical Association	2019 – Present

## **COMMUNITY SERVICE**

**Event Medicine** 

Medical Tent Volunteer Oct 2018 - Present

Volunteer at Electric Daisy Carnival (EDC), NFL/XFL football games/events at Allegiant Stadium, hockey games/events at T-Mobile stadium, the Army Ten Miler, and Marine Corps Marathon.

Clerkship & Step 2 Review Series

### Team Leader/Peer Educator

Organized and led a team of classmates to create an NBME Shelf/Step 2 CK review video series for current and future USUHS students during the unplanned interruption of clinical experiences due to COVID-19.

Transgender Medical School Curriculum

### Peer Small Group Facilitator

Facilitated a 6-student didactic session focused on educating learners about transgender medical care and transgender policies within the military.

Parker Adventist Hospital

## **Emergency Department Volunteer**

Volunteered 4-8hrs per week focused on patient-comfort in a Level II Emergency Department; restocked rooms, interacted with patients and families; helped coordinate care between hospital departments including radiology, chaplaincy, and medical wards.

Feb 2020

Mar 2020 - May 2020

Nov 2015 - May 2017