

Karl Alcover  
Medicine  
Basic Sciences  
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## Research interests

Long-term health outcomes, injury, substance use, mental health  
Epidemiology, Biostatistics

## Qualifications

Epidemiology, PhD  
Biology, Bachelor

## Employment

### Medicine

Uniformed Services University of the Health Sciences  
12 Sep 1972 → present

### Basic Sciences

Uniformed Services University of the Health Sciences  
12 Sep 1972 → present

## Research outputs

### **Serum concentrations of persistent endocrine-disrupting chemicals in U.S. military personnel: A comparison by race/ethnicity and sex**

Alcover, K. C., McAdam, J., Denic-Roberts, H., Byrne, C., Sjodin, A., Davis, M., Jones, R., Zhang, Y. & Rusiecki, J. A., Apr 2025, In: International Journal of Hygiene and Environmental Health. 265, 114540.

### **Serum concentrations of persistent endocrine-disrupting chemicals in U.S. military personnel: A comparison by race/ethnicity and sex**

Alcover, K. C., McAdam, J., Denic-Roberts, H., Byrne, C., Sjodin, A., Davis, M., Jones, R., Zhang, Y. & Rusiecki, J. A., Apr 2025, In: International Journal of Hygiene and Environmental Health. 265, p. 114540

### **Comparative cohort study of post-acute COVID-19 infection with a nested, randomized controlled trial of ivabradine for those with postural orthostatic tachycardia syndrome (the COVIVA study)**

Saunders, D., Arnold, T. B., Lavender, J. M., Bi, D., Alcover, K., Hellwig, L. D., Leazer, S. T., Mohammed, R., Markos, B., Perera, K., Shaw, D., Kobi, P., Evans, M., Mains, A., Tanofsky-Kraff, M., Goguet, E., Mitre, E., Pratt, K. P., Dalgard, C. L. & Haigney, M. C., 2025, In: Frontiers in Neurology. 16, 1550636.

### **Disease and non-battle injury incidence rate trends in the US military, 2010–2021**

Alcover, K. C., Howard, K. J., Poltavskiy, E., Dao, B., Stewart, I. & Howard, J. T., 2025, (Accepted/In press) In: BMJ Military Health. 003027.

### **Disease and Non-Battle Injury in Deployed Military: A Systematic Review and Meta-analysis**

Alcover, K. C., Howard, K., Poltavskiy, E., Derminassian, A. D., Nickel, M. S., Allard, R. J., Dao, B., Stewart, I. J. & Howard, J. T., 1 Sep 2024, In: Military Medicine. 189, Suppl 3, p. 21-30 10 p.

### **Trends of Heat-Related Deaths in the US, 1999-2023**

Howard, J. T., Androne, N., Alcover, K. C. & Santos-Lozada, A. R., 26 Aug 2024, (E-pub ahead of print) In: JAMA - Journal of the American Medical Association.

**Exploring sleep duration and clinical reasoning process in resident physicians: a thematic analysis**

Collen, J., Durning, S., Berk, J., Mang, J., Alcover, K. & Jung, E., 1 Aug 2024, In: Journal of Clinical Sleep Medicine. 20, 8, p. 1279-1289 11 p.

Patterns of mean age at drug use initiation by race and ethnicity, 2004–2019

Alcover, K. C., Lyons, A. J. & Amiri, S., Jun 2024, In: Journal of Substance Use and Addiction Treatment. 161, 209350.

**Unintended Consequences of Code Status in the Intensive Care Unit: What Happens After a Do-Not-Resuscitate Order Is Placed? A Retrospective Cohort Study**

Driggers, K. E., Keenan, L. M., Alcover, K. C., Atkin, M., Irby, K., Kovacs, M., McLawhorn, M. M., Mir-Kasimov, M., Sabbahi, W. Z., Sellman, J. & Johnson, L. S., 1 Apr 2024, In: Journal of Palliative Medicine. 27, 4, p. 508-514 7 p.

**Traumatic Brain Injury and Subsequent Risk of Brain Cancer in US Veterans of the Iraq and Afghanistan Wars**

Stewart, I. J., Howard, J. T., Poltavskiy, E., Dore, M., Amuan, M. E., Ocier, K., Walker, L. E., Alcover, K. C. & Pugh, M. J., 15 Feb 2024, In: JAMA Network Open. 7, 2, p. E2354588

**Utility of cell-based vaccines as cancer therapy: Systematic review and meta-analysis**

Tiwari, A., Alcover, K., Carpenter, E., Thomas, K., Krum, J., Nissen, A., Van Decar, S., Smolinsky, T., Valdera, F., Vreeland, T., Lacher, M., Del Priore, G., Williams, W., Stojadinovic, A., Peoples, G. & Clifton, G., 2024, In: Human Vaccines and Immunotherapeutics. 20, 1, 2323256.

**Factors Associated with Child Removal Among American Indian and Alaska Native People in an Alcohol Intervention Study**

the HONOR Study Team, Nov 2023, In: Child Maltreatment. 28, 4, p. 599-607 9 p.

**Long-Term Health Care Costs for Service Members Injured in Iraq and Afghanistan**

Stewart, I. J., Ambardar, S., Howard, J. T., Janak, J. C., Walker, L. E., Poltavskiy, E., Alcover, K. C., Watrous, J., Gundlapalli, A. V., Pettey, W. B. P., Suo, Y. & Nelson, R. E., 1 Jul 2023, In: Military Medicine. 188, 7-8, p. E2431-E2438

SARS-CoV-2 Antibody Longitudinal Profile of Immune Globulin Preparations

Park, H. J., Alcover, K. C., Wang, Q. & Gada, S. M., 1 Jul 2023, In: Military Medicine. 188, 7-8, p. 1615-1619 5 p.

Suicide attempts and mental health diagnoses in combat-injured service members: A retrospective cohort study

Walker, L. E., Poltavskiy, E., Howard, J. T., Janak, J. C., Watrous, J., Alcover, K., Pettey, W. B. P., Ambardar, S., Meyer, E., Gundlapalli, A. V. & Stewart, I. J., Apr 2023, In: Suicide and Life-Threatening Behavior. 53, 2, p. 227-240 14 p.

Outcomes Associated With Intensive Care and Organ Support Among Patients With COVID-19: A Systematic Review and Meta-Analysis

Leazer, S., Collen, J., Alcover, K., Tompkins, E., Ambardar, S., Allard, R. J., Foster, B., McNutt, R., Leon, M., Haynes, Z., Bascome, M., Williams, M., Bunin, J., O'Malley, P. G., Moores, L. K. & Chung, K. K., 20 Mar 2023, In: Military Medicine. 188, 3-4, p. 541-546 6 p.

**Intensive Care and Organ Support Related Mortality in Patients with COVID-19: A Systematic Review and Meta-Analysis**

Chandel, A., Leazer, S., Alcover, K. C., Farley, J., Berk, J., Jayne, C., McNutt, R., Olsen, M., Allard, R., Yang, J., Johnson, C., Tripathi, A., Rehtin, M., Leon, M., Williams, M., Sheth, P., Messer, K., Chung, K. K. & Collen, J., 3 Mar 2023, In: Critical Care Explorations. 5, 3, p. E0876

**DIAGNOSTIC VALUE OF MITOCHONDRIAL DNA AND PERIPHERAL BLOOD MONONUCLEAR CELL RESPIROMETRY FOR BURN-RELATED SEPSIS**

Robles, M. C., Heard, T. C., Chao, T., Alcover, K., Wagner, A., Akers, K. S. & Burmeister, D. M., 1 Feb 2023, In: Shock. 59, 2, p. 294-299 6 p.

Past-year marijuana use and dependence: veterans versus general population

Derminassian, A. D., Nickel, M. S. & Alcover, K. C., 2023, (Accepted/In press) In: BMJ Military Health. military-2023-002464.

**Post-Combat-Injury Opioid Prescription and Alcohol Use Disorder in the Military**

Alcover, K. C., Poltavskiy, E. A., Howard, J. T., Watrous, J. R., Janak, J. C., Walker, L. E. & Stewart, I. J., Dec 2022, In: American Journal of Preventive Medicine. 63, 6, p. 904-914 11 p.

**Diagnostic value of mitochondrial DNA and peripheral blood mononuclear cell respirometry for burn-related sepsis**

Robles, M. C., Heard, T. C., Chao, T., Alcover, K., Wagner, A., Akers, K. S. & Burmeister, D., 3 Nov 2022, (E-pub ahead of print) In: Shock.

**Concordance Between Point-of-Care Urine Ethyl Glucuronide Alcohol Tests and Self-Reported Alcohol Use in Persons with HIV in Uganda**

Alcover, K. C., Emenyonu, N. I., Fatch, R., Kekibiina, A., Marson, K., Chamie, G., Muyindike, W. R., Beesiga, B., Kanya, M. R., Lodi, S., Kane, J. C., Hahn, J. A. & McDonell, M. G., Aug 2022, In: AIDS and Behavior. 26, 8, p. 2539-2547 9 p.

**A Multicenter Evaluation of the Seraph 100 Microbind Affinity Blood Filter for the Treatment of Severe COVID-19**

Chitty, S. A., Mobbs, S., Rifkin, B. S., Stogner, S. W., Lewis, M. S., Betancourt, J., DellaVolpe, J., Abouzahr, F., Wilhelm, A. M., Szerlip, H. M., Parikh, A., Gaeta, R. M., Rivera, I., Park, C., Levi, B., Anesi, G. L., Alcover, K. C., Arnold, T. B., Howard, J. T., Sharma, K., & 3 othersPratt, K. P., Stewart, I. J. & Chung, K. K., Apr 2022, In: Critical Care Explorations. 4, 4, p. e0662

**A Multicenter Evaluation of the Seraph 100 Microbind Affinity Blood Filter for the Treatment of Severe COVID-19**

Chitty, S. A., Mobbs, S., Rifkin, B. S., Stogner, S. W., Lewis, M. S., Betancourt, J., Dellavolpe, J., Abouzahr, F., Wilhelm, A. M., Szerlip, H. M., Parikh, A., Gaeta, R. M., Rivera, I., Park, C., Levi, B., Anesi, G. L., Alcover, K. C., Arnold, T. B., Howard, J. T., Sharma, K., & 3 othersPratt, K. P., Stewart, I. J. & Chung, K. K., 25 Mar 2022, In: Critical Care Explorations. 4, 4, p. E0662

**A Prospective Observational Study Comparing Clinical Sepsis Criteria to Protein Biomarkers Reveals a Role for Vascular Dysfunction in Burn Sepsis**

Burmeister, D. M., Heard, T. C., Chao, T., Alcover, K., Wagner, A., Chung, K. K. & Akers, K. S., 5 Jan 2022, In: Critical Care Explorations. 4, 1, p. E0610

**A Prospective Observational Study Comparing Clinical Sepsis Criteria to Protein Biomarkers Reveals a Role for Vascular Dysfunction in Burn Sepsis**

Burmeister, D. M., Heard, T. C., Chao, T., Alcover, K., Wagner, A., Chung, K. K. & Akers, K. S., Jan 2022, In: Critical Care Explorations. 4, 1, p. e0610

**Onset of alcohol use disorder among alcohol initiates by race/ethnicity**

Alcover, K. C., Lyons, A. J., Oluwoye, O., Muse, I. D., Kelly, M. E. & McDonell, M. G., Dec 2021, In: Alcohol. 97, p. 13-21 9 p.

**Social and Professional Impact of Learning Communities Within the Alliances for Graduate Education and the Professoriate Program at Michigan State University**

Thomas, S. D., Ali, A., Alcover, K., Augustin, D. & Wilson, N., 25 Nov 2021, In: Frontiers in Psychology. 12, 734414.

**Traumatic injury and atrial fibrillation among deployed service members**

Alcover, K. C., Ambardar, S. R., Poltavskiy, E., Nasir, J. M., Janak, J. C., Howard, J. T., Walker, L. E., Haigney, M. C. & Stewart, I. J., Sep 2021, In: Journal of Cardiovascular Electrophysiology. 32, 9, p. 2590-2594 5 p.

**Cannabis use and metabolic syndrome among clients with first episode psychosis**

Stiles, E., Alcover, K. C., Stiles, B., Oluwoye, O. & McDonell, M. G., Aug 2021, In: Early Intervention in Psychiatry. 15, 4, p. 1051-1055 5 p.

**Clinical prediction of extra-medical use of prescription pain relievers from a representative United States sample**

Thompson, C. L., Alcover, K. C. & Yip, S. W., Aug 2021, In: Preventive Medicine. 149, 106610.

**Effect of Incentives for Alcohol Abstinence in Partnership with 3 American Indian and Alaska Native Communities: A Randomized Clinical Trial**

McDonell, M. G., Hirchak, K. A., Herron, J., Lyons, A. J., Alcover, K. C., Shaw, J., Kordas, G., Dirks, L. G., Jansen, K., Avey, J., Lillie, K., Donovan, D., McPherson, S. M., Dillard, D., Ries, R., Roll, J. & Buchwald, D., Jun 2021, In: JAMA Psychiatry. 78, 6, p. 599-606 8 p.

Mixed-methods trial of a phosphatidylethanol-based contingency management intervention to initiate and maintain alcohol abstinence in formerly homeless adults with alcohol use disorders

Fraser, E. R., Hill-Kapturczak, N., Jett, J., Beck, R., Oluwoye, O., Kriegel, L. S., Alcover, K. C., McPherson, S., Cabassa, L. J., Javors, M. & McDonell, M. G., Jun 2021, In: Contemporary Clinical Trials Communications. 22, 100757.

**Development and Validation of a Prediction Model of Prescription Tranquilizer Misuse Based on a Nationally Representative United States Sample**

Thompson, C. L., Alcover, K. & Yip, S. W., 1 Jan 2021, In: Drug and Alcohol Dependence. 218, 108344.

**Racial and ethnic differences in alcohol-, opioid-, and co-use-related deaths in Washington State from 2011 to 2017**

Oluwoye, O., Kriegel, L. S., Alcover, K. C., Hirchak, K. & Amiri, S., Dec 2020, In: Addictive Behaviors Reports. 12, 100316.

Assessing the Predictive Validity of the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) in Alaska Native and American Indian People

Lillie, K. M., Jansen, K. J., Dirks, L. G., Lyons, A. J., Alcover, K. C., Avey, J. P., Hirchak, K., Herron, J., Buchwald, D., Donovan, D. M., McDonell, M. G. & Shaw, J. L., 1 Sep 2020, In: Journal of addiction medicine. 14, 5, p. E241-E246

Patterns of Mean Age at Drug Use Initiation among Adolescents and Emerging Adults, 2004-2017

Alcover, K. C. & Thompson, C. L., Jul 2020, In: JAMA Pediatrics. 174, 7, p. 725-727 3 p.

Pilot study of an integrated smartphone and breathalyzer contingency management intervention for alcohol use

Oluwoye, O., Reneau, H., Herron, J., Alcover, K. C., McPherson, S., Roll, J. & McDonell, M. G., 1 May 2020, In: Journal of addiction medicine. 14, 3, p. 193-198 6 p.

Proximity to screening site, rurality, and neighborhood disadvantage: Treatment status among individuals with sexually transmitted infections in yakima county, washington

Amiri, S., Pham, C. D., Amram, O., Alcover, K. C., Oluwoye, O., Bravo, L., Sixberry, M., McDonell, M. G., Roll, J. M. & Fresco, A., 2 Apr 2020, In: International Journal of Environmental Research and Public Health. 17, 8, 2679.

The impact of early family contact on quality of life among non-Hispanic Blacks and Whites in the RAISE-ETP trial

Oluwoye, O., Kriegel, L., Alcover, K. C., Compton, M. T., Cabassa, L. J. & McDonell, M. G., Feb 2020, In: Schizophrenia Research. 216, p. 523-525 3 p.

**The Dissemination and Implementation of Contingency Management for Substance Use Disorders: A Systematic Review**

Oluwoye, O., Kriegel, L., Alcover, K. C., McPherson, S., McDonell, M. G. & Roll, J. M., 2020, In: Psychology of Addictive Behaviors. 34, 1, p. 99-110 12 p.

“Side Effects” Observed Within ~1–90 Days After Cannabis Onset: Epidemiological Estimates for the United States, 2004–2014

Alcover, K. C., Thompson, C. & Anthony, J. C., 1 Nov 2019, In: American Journal on Addictions. 28, 6, p. 465-472 8 p.

Impact of first episode psychosis treatment on heavy cannabis use: Secondary analysis on RAISE-ETP study

Alcover, K. C., Oluwoye, O., Kriegel, L., McPherson, S. & McDonell, M. G., Sep 2019, In: Schizophrenia Research. 211, p. 86-87 2 p.

**Rapid transition from drinking to alcohol dependence among adolescent and young-adult newly incident drinkers in the United States, 2002–2013**

Cheng, H. G., Chandra, M., Alcover, K. C. & Anthony, J. C., 1 Nov 2016, In: Drug and Alcohol Dependence. 168, p. 61-68 8 p.

## Press/Media

**Reports on Medical Devices and Surgical Technology Findings from Uniformed Services University of the Health Sciences Provide New Insights (Unintended Consequences of Code Status In the Intensive Care Unit: What Happens After a ...)**

Karl Alcover

25/04/24

1 item of Media coverage

**Researcher at Uniformed Services University of the Health Sciences Publishes Research in Veterans (Traumatic Brain Injury and Subsequent Risk of Brain Cancer in US Veterans of the Iraq and Afghanistan Wars)**

Karl Alcover

5/03/24

1 item of Media coverage

**Studies from Uniformed Services University of the Health Sciences Provide New Data on Veterans (Long-Term Health Care Costs for Service Members Injured in Iraq and Afghanistan)**

Karl Alcover

20/02/23

1 item of Media coverage

**Studies from Uniformed Services University of the Health Sciences Update Current Data on Mental Health (Patterns of Mean Age At Drug Use Initiation By Race and Ethnicity, 2004-2019)**

Karl Alcover

6/06/24

1 item of Media coverage

**Study Findings from Uniformed Services University School of Medicine Update Knowledge in COVID-19 [Comparative cohort study of post-acute COVID-19 infection with a nested, randomized controlled trial of ivabradine for those with postural ...]**

Lydia Hellwig, Jason Lavender, Karl Alcover, Mark Haigney, Kathleen Pratt, David Saunders, Clifton Dalgard & Edward Mitre

17/07/25

1 item of Media coverage

**Washington State University Researcher Adds New Study Findings to Research in Child Maltreatment (Factors Associated with Child Removal Among American Indian and Alaska Native People in an Alcohol Intervention Study)**

Karl Alcover

15/11/22

1 item of Media coverage

## Grants

**DHA-22-MHSR, The MEDical READiness PROject (MED READ PRO)**

Stewart, I., Alcover, K. & Howard, J. T.

Military Health System: \$398,000.00

1/10/22 → ...

## Projects

**MED READ PRO: Medical Readiness Project**

Stewart, I., Alcover, K. & Howard, J. T.

1/10/22 → 30/09/24