

CURRICULUM VITAE

DANA MOWLS CARROLL, PhD, MPH

IDENTIFYING INFORMATION

Academic Rank

Assistant Professor in Division of Environmental Health Sciences, School of Public Health,
University of Minnesota, Twin Cities Campus, Minneapolis, MN

Education

Degree	Institution	Date Degree Granted
B.S.	The Ohio State University Molecular Genetics	2011
M.P.H.	Kent State University Epidemiology	2013
Ph.D.	University of Oklahoma Health Sciences Center Epidemiology (Advisor for Ph.D. Dr. Laura A. Beebe)	2017

Certifications

* Tobacco Treatment Specialist Training Program and Certification	2020
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Positions/Employment

Academic appointments

University of Minnesota, Twin Cities campus School of Public Health Assistant Professor	2019 – present
University of Minnesota, Twin Cities campus Tobacco Research Programs, Masonic Cancer Center Postdoctoral Associate	2017-2019
University of Oklahoma Health Sciences Center Biostatistics and Epidemiology Research Design and Analytic Center Graduate Research Assistant	2013-2017
Summit County Public Health Biostatistics and Epidemiology Unit, Summit County Public Health Graduate Research Assistant	2012-2013
Kent State University College of Public Health Graduate Research Assistant	2011-2012

Consulting/Independent Contracting Work

ClearWay Minnesota, dissemination of Tribal Tobacco Use Project (TTUP)-II	2021
Grant reviewer for Oklahoma Tobacco Settlement Endowment Trust (TSET)	2020

Current and Past Membership in Professional Organizations/Societies

American Association for Cancer Research	2021– present
Society for Epidemiologic Research (SER)	2017 – present
Society for Research on Nicotine and Tobacco (SRNT)	2013 – present

**HONORS AND AWARDS RECEIVED FOR RESEARCH/CREATIVE WORK,
TEACHING EFFECTIVENESS, PUBLIC ENGAGEMENT, AND SERVICE**

University of Minnesota

Post-Doctoral Research Slam, Best Flash Talk Presentation (2019)
PharmacoNeuroImmunology (PNI) Training Program Poster Presentation Award (2018)

External Sources

* University of Oklahoma Health Sciences Center, Hudson College of Public Health, Young Alumni Award (2020)

University of Oklahoma Health Sciences Center, Outstanding Dissertation Award (2018)

Delta Omega Honorary Society in Public Health, Xi Chapter (2017-present)

University of Oklahoma Health Sciences Center, College of Public Health, Outstanding Student in College of Public Health (2017)

University of Oklahoma Health Sciences Center, College of Public Health, Outstanding Student in Epidemiology (2017)

University of Oklahoma Health Sciences Center, College of Public Health, Outstanding Student Leadership Award (2017)

University of Oklahoma Health Sciences Center, O. Ray Kling Award for Outstanding Graduate Student Leadership (2016)

University of Oklahoma Health Sciences Center, Graduate College Award for Outstanding Research (2016)

University of Oklahoma Health Sciences Center, College of Public Health, Hudson Fellowship in Public Health (2015)

University of Oklahoma Health Sciences Center, Graduate College Award for Scientific Achievement (2015)

University of Oklahoma Health Sciences Center, Graduate College Dean's Travel Award for Outstanding Research (2015)

Kent State University, College of Public Health, Graduate Student Excellence Award (2013)

Kent State University, Graduate Student Symposium, Achievement in Research Award (2013)

RESEARCH AND SCHOLARSHIP**Grants and Contracts*****Received at the University of Minnesota*****Grants Currently Funded*****External Sources: Federal/National/MN Statewide***

Role: Principal investigator
 Source: NIH/NCI
 Type: R21CA261078
 Title: Culturally-tailored smartphone application for smoking cessation in American Indians
 Date(s): 09/01/2021 – 08/31/2023
 Total Direct Costs: \$264,743
 Current effort: 11%

Role: Principal Investigator
 Source: NIH/NIMHD
 Type: K01MD014795
 Title: Laying the Foundation for Personalized Smoking Cessation Treatment in the American Indian Population
 Date(s): 08/03/2020-02/28/2025
 Total Direct Costs: \$635,000
 Current effort: 75%

Role: Co-Investigator
 PI: Irina Stepanov/Dorothy Hatsukami (Medical School, UMN)
 Source: NIH/NIDA
 Type: R01DA051005
 Title: Impact of sugars on tobacco product toxicity and abuse liability
 Date(s): 06/01/2020 – 05/31/2023
 Current effort: 5%

Role: Co-Investigator
 PI: Dorothy Hatsukami (Medical School, UMN)
 Source: NIH/NIDA
 Type: U54DA031659
 Title: Evaluating New Nicotine Standards for Cigarettes
 Date(s): 03/01/2017 – 02/28/2022
 Current effort: 5% effort included as part of the K01

Role: Co-Investigator
 PI: Dorothy Hatsukami (Medical School, UMN)
 Source: NIH/NCI
 Type: P01CA217806

Title: Consortium on Methods Evaluating Tobacco (COMET): Filter Ventilation and Product Standards
 Date(s): 09/01/2017 – 08/31/2022
 Current effort: 3%

Role: Principal Investigator
 Source: NIH/NIMHD
 Type: Loan Repayment Program Award
 Title: Reducing tobacco-related health disparities in American Indians
 Date(s): 07/01/2019 - 06/30/2021
 Current effort: NA

Grants Currently Funded

Internal Sources: University of Minnesota

Role: Principal Investigator
 Source: Program Health Disparities Research and Masonic Cancer Center
 Type: 2020 Health Disparities Pilot Grant Program
 Title: Utilizing traditional tobacco to reframe what tobacco is and is not to promote commercial smoking cessation in American Indians
 Date(s): 12/15/2020-12/14/2021
 Direct Costs: \$25,000

Role: Principal Investigator
 Source: UMN Center for Evaluation of Nicotine in Cigarettes
 Type: Pilot project program
 Title: Impact of low nicotine educational messaging on smokers' perceptions and behavior
 Date(s): 02/01/2020-01/31/2022
 Direct Costs: \$30,000

Grants Previously Funded and Concluded

External Sources: Federal/National/MN Statewide

Role: Postdoctoral Associate
 PI: Thomas Molitor (Vet Med, UMN)
 Source: NIH/NIDA
 Type: T32 DA007097-30
 Title: Training in Neuroimmune/Neurobehavior Addiction Research
 Date(s): 06/05/2018-06/04/2019
 Effort: 100%

Grants Submitted and Under Review (decision pending)

External Sources: Federal/National/MN Statewide

Role: Co-investigator
 PI: Thomas Molitor (Vet Med, UMN)/Dorothy Hatsukami (Medical School, UMN)
 Source: NIH/NIDA

Type: R25
 Title: Summer Research Program for Diversity Students in Pharmacology-Immunology
 Effort: 1%
 Impact score: 23

Role: Co-Principal Investigator with Claradina Soto (USC)
 Source: NIH/NIMHD
 Type: R13
 Title: National Tribal Tobacco Conference: Reclaiming and Restoring Traditional Tobacco in Today's World
 Dates: 12/01/2021 – 11/30/2022
 Status: Under-review
 Score: 20
 Percentile: NA

Internal Sources: University of Minnesota

NA

Grants Re-Submitted and Under Review (decision pending)

External Sources: Federal/National/MN Statewide

NA

Grants In Progress or Preparation

External Sources: Federal/National/MN Statewide

NA

Grants Submitted and Not Funded

External Sources: Federal/National/MN Statewide

Role: Principal Investigator
 Source: Lung Cancer Research Foundation
 Type: 2019 LCRF Research Grant on Disparities in Lung Cancer
 Title: Biomarkers and DNA Adducts to Examine Smoking-Related Lung Cancer Susceptibility in American Indians
 Date(s): 7/1/2019 - 6/30/2021
 Direct Costs: \$150,000, 25%
 Re-Submitted date: 02/1/2019
 Original Submission date: 06/01/2018

Role: Co-Investigator
 Name of PI: Chris Pennell (Medical School, UMN)/Pamala Jacobson (Pharmacy, UMN)
 Source: NIH/NCI
 Type: P20
 Title: Precision Medicine to Reduce Cancer in Minnesota American Indians; Sub-project: Assessing Nicotine Metabolism in American Indians to Inform Smoking Cessation Treatment

Date(s): 09/01/2018-08/31/2022
 Direct Costs: Sub-project \$233,991, 25%
 Submission date: 01/26/2018

Role: Project Lead
 Source: NIH/NCI
 Type: MCC Supplement Community Outreach and Education
 Title: Adapting, implementing, and evaluating a smartphone app for smoking cessation with rural clinics
 Date(s): 09/11/2020 – 09/10/2021
 Effort: 12%

Role: Co-investigator
 PI: Jesse Berman
 Source: NIH/NIDA
 Type: R21
 Title: Hair as biological matrix for assessing changes in exposure to air pollution and psychosocial stress among urban adults during the COVID-19 pandemic
 Effort: 5%
 Impact score: 30

Internal Sources: University of Minnesota

Role: Principal Investigator
 Source: UMN Office of Academic Clinical Affairs
 Type: BOLD Ideas Grant Program
 Title: Tackling the Wicked Problem of Commercial Tobacco Use in Minnesota American Indians and Alaska Natives Through Culturally Tailored mobile applications
 Date(s): TBD
 Direct Costs: \$20,000

Received at University of Oklahoma Health Sciences Center:

Funded and Concluded

External Sources: Federal/National/Statewide

Role: Principal Investigator
 Source: NIH/NIDA
 Type: R36 DA042208-01
 Title: Nicotine Metabolism in American Indian Tobacco and Electronic Cigarette Users
 Date(s): 07/15/2016 – 06/30/2017
 Direct Costs: \$48,052, 100 % effort
 Impact score: 27

Faculty Development Activities regarding Research and Scholarship

*UMN SPH Jr. Faculty Peer-Supported Grant Writing Group	2021
*UMN AHC's Proposal Preparation Program (P3)	2020
*UT Transdisciplinary Community-Based Participatory Research Workshop	2020
UMN Health Equity Leadership & Mentoring Program	2019

Publications

Refereed/Peer Reviewed Journal Articles

- *1. Denlinger-Apte RL, Pacek LR, Cornacchione Ross J, Bansal-Travers M, Donny EC, Hatsukami DK, and **Carroll DM**. Risk perceptions of low nicotine cigarettes and alternative nicotine products across priority smoking populations. In press, *International Journal of Environmental Research and Public Health*, 2021.
Role: Developed study concept and design, analyzed data, and edited manuscript
- *2. **Carroll DM**, Lindgren B, Dermody SS, Denlinger-Apte R, Cassidy R, Smith T, Pacek L, Allen AM, Tidey JW, Donny EC, and Hatsukami D. Impact of nicotine reduction in cigarettes on population subgroups at high-risk for smoking-related disease and death. In press, *Drug and Alcohol Dependence*, 2021.
Role: Developed study concept and design, wrote manuscript
- *3. **Carroll DM**, Hatsukami DK. Cigarette filter ventilation and biomarkers—reply. *Cancer Epidemiol Biomarkers Prev*, 2021 In press
Role: Wrote response
- *4. **Carroll DM**, Hernandez C, Braaten G, Meier E, Jacobson P, Begnaud A, McGonagle E, Frizzell LB, Hatsukami DK. Recommendations to researchers for increasing American Indian representation in genetic research and personalized medicine. *Personalized Medicine*, Dec 2020 (online).
Role: Developed concept and wrote manuscript.
- *5. **Carroll DM**, Stepanov I, O'Connor R, Luo X, Cummings M, Rees V, Bickel WK, Berman ML, Ashley D, Bansal-Travers M, Shields P, and Hatsukami DK. Impact of cigarette filter ventilation on U.S. smokers' perceptions and biomarkers of exposure and potential harm. *Cancer Epidemiol Biomarkers Prev*. 2020 Oct 22. doi: 10.1158/1055-9965.EPI-20-0852. Epub ahead of print. PMID: 33093163.
Selected for Editor's Highlight Section
Role: Developed study concept and design, analyzed data, wrote manuscript
- *6. **Carroll DM**, Denlinger-Apte RL, Dermody S, King JK, Mercincavage M, Pacek LR, Smith TT, Trip HL, Smith CM. Polarization within the field of tobacco and nicotine science and its potential impact on trainees. *Nicotine & Tobacco Research*, 2020; ntaa148
Designated as Editor's Choice

Role: All authors contributed equally to the concept of the commentary and writing. Authorship ranking is alphabetical.

- *7. Cole AB, Hebert ET, Reitzel LR, **Carroll DM**, and Businelle MS. Health Risk Factors in American Indian and Non-Hispanic White Homeless Adults. *Am J Health Behav.* 2020, 44 (5): 631-641.
Role: Contributed to interpreting results and writing the manuscript
- *8. **Carroll DM**, Cigan S, Ikuemonisan J, Hammonds T, Stepanov I, St. Helen G, Benowitz N, Hatsukami D. Relationships between race, gender, and spot urine levels of biomarkers of tobacco exposure vary based on how creatinine is handled in analyses. *Nicotine & Tobacco Research.* 2020, 1-5.
Role: Developed study concept and design, analyzed data, wrote manuscript
- *9. Hatsukami DK and **Carroll DM**. Tobacco Harm Reduction: Past History, Current Controversies, and a Proposed Approach for the Future. *Preventive Medicine.* 23 2020 April, 106099
Role: Contributed to writing the manuscript
- *10. **Carroll DM**, Murphy SE, Benowitz NL, Strasser AA, Kotlyar M, Hecht SS, Carmella SG, McClernon J, Pacek LR, Dermody SS, Vandrey RG, Donny EC, and Hatsukami DK. Relationships between nicotine metabolite ratio and a panel of exposure and effect biomarkers: findings from two studies of U.S. commercial cigarette smokers. *Cancer Epidemiol Biomarkers Prev.* 2020 April (29) (4) 871-879.
Role: Developed study concept and design, analyzed data, wrote manuscript
- *11. Smith TT, Donny EC, Lou X, Allen AM, **Carroll DM**, Denlinger-Apte RL, Dermody SS, Koopmeiners JS, McClernon FJ, Pacek LR, Vandrey R, Hatsukami DK. The impact of gradual and immediate nicotine reduction on subjective cigarette ratings. *Nicotine & Tobacco Research*, 2019 Dec 23;21(Suppl 1): Pages S73–S80.
Role: Contributed to literature review and writing the manuscript
- *12. Koopmeiners JS, Vock DM, Boatman JA, **Carroll DM**, Colby SM, Donny EC, Hatsukami DK, Lou X, Tidey JW. The Importance of Estimating Causal Effects for Evaluating a Nicotine Standard for Cigarettes. *Nicotine & Tobacco Research.* 2019 Dec 23;21(Suppl 1):S22-S25.
Role: Contributed to writing the manuscript
- 13. **Carroll DM**, Soto C, Baezconde-Garbanati L, Huang LL, Lienemann BA, Meissner HI, Rose SW, Unger JB, Cruz TB. Tobacco Industry Marketing Exposure and Commercial Tobacco Product Use Disparities among American Indians and Alaska Natives. *Subst Use Misuse.* 2019 Sep 23:1-10. doi: 10.1080/10826084.2019.1664589. [Epub ahead of print]
Role: Developed analytic plan, analyzed data, and wrote manuscript
- 14. **Carroll DM**, Strayer L, Nardone N, Pacek LR, Kozink RV, Tessier K, McClernon J, Benowitz N, Bickel WK, and Hatsukami D. An Experimental Tobacco and Nicotine Product Marketplace: A Platform for Testing Policies and Regulations. *Nicotine & Tobacco Research*, ntz195, <https://doi.org/10.1093/ntr/ntz195>

Role: Collected data, developed analytic plan, analyzed data, and wrote manuscript

15. Boley Cruz T, Rose SL, Lienemann BA, Bryon MJ, Meissner HI, Baezconde-Garbanati L, Huang LL, **Carroll DM**, Soto C, Unger JB. Pro-tobacco marketing and anti-tobacco campaigns aimed at vulnerable populations: A review of the literature. Accepted, Tobacco Induced Diseases. 2019: 17 (September): 68. DOI: 10.18332/tid/111397.

Role: Assisted with literature review and writing of manuscript

16. **Carroll DM**, Allenzara A, Jensen J, Stepanov I, Hecht S, Murphy S, Lou X, Donny E, and Hatsukami D. Biomarkers of Tobacco-Related Exposure and Potential among Cigarette Smokers of the Natural American Spirit Brand. *Tobacco Regulatory Science*. 5(4):339-351.

Role: Developed analytic plan, analyzed data, and wrote manuscript

17. **Carroll DM**, Wagener TL, Brame LS, Stephens LD, Thompson DM, Beebe LA. Nicotine Metabolism and Tobacco Consumption, and Carcinogen Exposure among American Indians. *Addictive Behaviors*. 10.1016/j.addbeh.2018. 10.038

Role: Developed study concept, secured funding, analyzed data, and wrote manuscript

18. **Carroll DM**, Wagener TL, Stephens LD, Thompson DM, Peck JD, Campbell JE, Beebe LA. (2018) Electronic nicotine delivery system use behavior and loss of autonomy among American Indians- results from an observational pilot study. *BMJ Open*. 7(12):e018469

Role: Developed study concept, secured funding, analyzed data, and wrote manuscript

19. **Carroll DM**, Wagener TL, Peck JD, Brame LB, Thompson DM, Stephens LD, Campbell JE, Beebe LA. (2018) Biomarkers of exposure in ENDS users, smokers, and dual users of American Indian descent. *Tob Regul Sci*. 4(2):3-15.

Role: Developed study concept, secured funding, analyzed data, and wrote manuscript

20. Leavens ELS, Meier E, Tackett AP, Miller MB, Brett EI, Tahirkheli NN, **Mowls DS**, Driskill LM, Anderson M & Wagener TL. (2018) The impact of a brief cessation induction intervention for waterpipe tobacco smoking: A pilot randomized clinical trial. *Addictive Behaviors*. 78:94-100

Role: Contributed to data collected and assisted with writing the manuscript

21. **Carroll DM**, Brame LS, Stephens LD, Wagener TL, Campbell JE, Beebe LA. (2017) Community-based Study Recruitment of American Indians Cigarette Smokers and Electronic Cigarette Users. *J Community Health*. 10.1007/s10900-017-0401-0

Role: Developed study concept, secured funding, analyzed data, and wrote manuscript

22. **Mowls DS**, Boeckman L, Gillaspay T, Beebe LA. (2017) Long-term Quit Rates Among Fax-Referred as Compared to Self-Referred Quitline Registrants. *Am J Prev Med*. 54(4):e115-121.

Role: Conducted literature review, analyzed data, and wrote manuscript

23. Cheruvu VK, Odhiambo L, Gudina A, **Mowls DS**, Zullo MD. (2016) Health-Related Quality of Life in Current Smokers with COPD: Factors Associated with Current Smoking and New Insights into Gender Differences. *Int J Chron Obstruct Pulmon Dis*. 11: 2211–2219.
Role: Assisted with writing manuscript
24. Martinez SA, Janitz AE, Erb-Alvarex J, **Mowls DS**, Campbell JE, Anderson T. (2016) Cancer among American Indians – Identifying Priority Areas in Oklahoma. *J Okla State Med Assoc*. 109(7):374-384.
Role: Assisted with writing manuscript
25. **Mowls DS**, Brame LS, Martinez, SA, Beebe LA (2016). Lifestyle Behaviors Among U.S. Cancer Survivors. *J Cancer Surviv*. 10(4):692-8.
Role: Conducted literature review, designed study, analyzed data, wrote manuscript
26. Brame, LS, **Mowls DS**, Damphousse KE, Beebe LA. (2016) Electronic Nicotine Delivery System Landscape in Licensed Tobacco Retailers: Results of County-Level Survey in Oklahoma. *BMJ Open*. 6:e011053
Role: Mentored first author, designed study, analyzed data, assisted with writing manuscript
27. Damphousse KE, **Mowls DS**, Beebe LA (2015). An Ecological Analysis of Tobacco use and Oral Cavity and Pharynx Cancers in U.S. Males. *J Okla State Med Assoc*. 108(11):488-91.
Role: Mentored first author, designed study, analyzed data, assisted with writing manuscript
28. **Mowls DS**, Campbell JE, Beebe LA (2015). Race and Gender Disparities in Lung Cancer Incidence Rates, 2001-2010. *J Okla State Med Assoc*. 108(11):482-7.
Role: Conducted literature review, analyzed data, and wrote manuscript
29. Tankut S, **Mowls DS**, McCaffree DR (2015). Factors Associated with Smoking Cessation Attempts in Asthmatics. *J Okla State Med Assoc*. 108(11):477-81.
Role: Mentored first author, analyzed data, assisted with writing manuscript
30. **Mowls DS**, McCaffree DR, Beebe LA (2015). Trends in Lung Cancer Incidence Rates, Oklahoma 2005-2010. *PloS One*. 10(4):e0119251.
Role: Developed study concept and design, analyzed data, wrote manuscript
31. **Mowls DS**, Cheruvu VK, Schilz R, Zullo MD (2014). COPD in a Nationally Representative Sample: Sociodemographic Factors and Co-morbidity, Diagnosis Method, and Healthcare Utilization. *COPD*. 12(1):96-103.
Role: Conducted literature review, analyzed data, wrote manuscript

32. **Mowls DS**, Cheruvu VK, Zullo MD (2014). Clinical and Individual Factors Associated with Smoking Quit Attempts among Adults with COPD: Do Factors Vary with Regard to Race? *Int J Environ Res Public Health*. 11(4):3717-3727
Role: Conducted literature review, analyzed data, wrote manuscript
33. **Mowls DS**, Cheruvu VK, Zullo MD (2013). Influenza Vaccination in Adults with Chronic Obstructive Pulmonary Disease: The Impact of a Diagnostic Breathing Test on Vaccination Rates. *PLoS One*. 8(6):e67600.
Role: Conducted literature review, analyzed data, wrote manuscript

Peer Reviewed Journal Articles Submitted and Under Review (decision pending)

1. **Carroll DM**, Cole A. U.S. representative examination of racial/ethnic group disparities in smoking behaviors and cessation-related factors. Under review with *American Journal of Alcohol and Drug Abuse*.
Role: Developed study concept and design, analyzed data, wrote manuscript
2. Differding M*, Katz SJ, Stayer L, White C, Strasser A, Donny E, and Hatsukami DK and **Carroll DM**. Educating the public on a low nicotine content standard in cigarettes: Results from a U.S.- based convenience sample. Under review with *Nicotine and Tobacco Research*.
Role: Developed study concept and design, acquired funding, analyzed data, wrote manuscript and mentored student in writing manuscript
* Student mentee
3. Breland A, **Carroll DM**, Denlinger-Apte R, Cornacchione-Ross J, Soto C, White C, Donny E, Fagan P, Hatsukami D, Gardiner P, Eissenberg T, and Guy MC. Bringing racial justice to the forefront of commercial tobacco product regulations.
Role: Contributed to writing of the commentary. Under review with *AJPH*.
4. **Carroll DM**, Cummings M, Stepanov I, Tessier K, Shields P, Reisinger S, O'Connor R, Hatsukami DK, and Rees V. Smoking trajectories and harm perceptions as a function of cigarette filter ventilation level among U.S. youth and young adults who smoke. Under review with *Tobacco Control*.
Role: Developed study concept and design, analyzed data, wrote manuscript

Journal Articles in Progress

1. **Carroll DM**, Hernandez C, Dorr C, Braaten G, Meier E, Jacobson P, Begnaud A, McGonagle E, Tyndale R, Murphy S, Rhodes K, and Frizzell LB. Generalizing the nicotine informed approach to smoking cessation to the American Indian population: Pilot Study Findings.
Role: Developed study concept and design, analyzed data, wrote manuscript

Non-Refereed/Peer Reviewed Report, Journal Articles, or Essays

1. Beaird H, **Mowls DS**, and Blaire S (2014). Summit County Maternal and Child Health Indicators: A Report to the community from the Summit County Child and Family Health Services Consortium. Stow, OH: Summit County Public Health.
2. Beaird H, **Mowls DS**, and Towne K (2013). Portage County Maternal and Child Health Indicators: A Report to the Portage County Maternal and Child Health Consortium for Issue Prioritization. Portage County Child and Family Health Services Program. Ravenna, OH: Portage County Health Department.
3. **Mowls DS** (2013). Infant Mortality Brief, 2000-2009. Summit County Child and Family Health Services Program. Stow, OH: Summit County Public Health Department.

Media and Interviews

- *1. The Pulse, a weekly health and science podcast. May 14, 2021. Sacred tobacco and American Indians, tradition and conflict. <https://why.org/segments/keep-it-sacred-smoking-indigenous-people-tradition-and-conflict/>
- *2. Minnesota Daily. "UMN researcher collaborates with American Indian tribes working toward smoking cessation " February 25, 2021. <https://mndaily.com/265843/news/umn-researcher-collaborates-with-american-indian-tribes-working-toward-smoking-cessation/>
- *3. WalletHub. "The Real Cost of Smoking by State." January 13, 2021. <https://wallethub.com/edu/the-financial-cost-of-smoking-by-state/9520>

Presentations, Posters, and Exhibits

Invited Presentations at Professional Meetings, Conferences, etc.

- *1. Application of the Population Assessment of Tobacco Use and Health (PATH) Study. January 14, 2021. Presented at the Cancer Research Translational Initiative Data Palooza: Data Resources for Population-Based Cancer Research
- *2. E-cigarette polarization and recommendations to curtail its potential to exacerbate tobacco-related disparities. December 17, 2020. Presented at the Society for Research on Nicotine and Tobacco's E-cigarette and Health Equity Virtual Event.
- *3. Best practices for protecting minority and underrepresented populations in the study of biospecimens and other detailed personal health information. August 2020. Presented at American Conference of Governmental Industrial Hygienists webinar as part of Perspectives on Total Worker Exposure, its Applications, and its Implications.

- *4. PharmacoNeuroImmunology (PNI) Annual Retreat. October 2019. Panel: Career Development Roundtable. Title: Science Policy.
- 5. Summit for Native American & Rural Health—Addressing the Precision Medicine Knowledge Gap. March 2018. Role: Presenter. Title: A Precision Medicine Approach To Smoking Cessation in Native Americans.
- 6. Southern Plains Tribal Public Health Conference. April 2016. Role: Panel member. Title: Working with tribes for health research.

Invited Seminar Presentations

- *1. Masonic Cancer Center Seminar Series. Role: Co-Presenter. Title: From bench science to the community: an example of using the Masonic Cancer Center's expertise to help respond to a community-identified need. March 2021.
- *2. South Carolina Research Interest Group (SC TRIG). Role: Presenter. Title: From culturally-tailored smoking cessation interventions to tobacco harm reduction: the many opportunities for reducing commercial tobacco use disparities. February 2021.
- *3. University of Minnesota Health Equity Workgroup (HEWG) Spring Meeting. Role: Presenter. Title: Collaborations with American Indian Tribes and Communities to Achieve Health Equity. February 2021.
- *4. Minnesota State Health Access Data Assistance Center (SHADAC) Research Meeting. Role: Presenter. Title: Working as an ally to American Indians communities to reduce the burden of commercial tobacco use. January 2021.
- *5. Masonic Cancer Center Tobacco Research Programs Seminar Series. Role: Presenter. Title: Tobacco Use Disparities in Minnesota and Community Engaged Research. April 2020.
- *6. Masonic Cancer Center Seminar Series. Role: Presenter. Title: Community-Based Participatory Research to Reduce Commercial Smoking among American Indians. February 2020.
- 7. PharmacoNeuroImmunology (PNI) Seminar Series. Role: Presenter. Title: Setting the stage for genetic and personalized medicine studies for smoking cessation among American Indians. December 2018.
- 8. Minnesota Precision Medicine Collaborative—Precision Medicine Seminar Series. October 2018. Role: Presenter. Title: Towards A Precision Medicine Approach to Smoking Cessation in Native Americans.
- 9. Masonic Cancer Center Tobacco Research Programs Seminar Series. February 2018. Role: Presenter. Title: Nicotine Metabolism among American Indian Smokers.

10. Biostatistics and Epidemiology Seminars Series Presentation. May 2017. Role: Presenter. Title: Cigarette Smoking, Electronic Nicotine Product Use, and Biomarkers of Exposure Among American Indians in the Southern Plains.
11. Masonic Cancer Center Tobacco Research Programs Seminar Series. December 2016. Role: Presenter. Title: Cigarette Smoking, and Electronic Nicotine Product Use Among American Indians in the Southern Plains.
12. OUHSC Biostatistics and Epidemiology Seminar Series. February 2016. Role: Presenter. Title: Nicotine Metabolism in American Indian Smokers and Electronic Cigarette Users.

Paper Presentations at Professional Meetings, Conferences, etc.

- *1. **Carroll DM.** Researcher directed recommendations for collaborating with American Indians Tribes/Communities to Achieve Smoking-Related Health Equity. Symposium session: *Where the Rubber Meets the Road: Culturally Tailored Tobacco Control Research and Interventions to Achieve Health Equity*. Society for Research on Nicotine and Tobacco Conference. February 2021. Virtual conference.
- *2. **Carroll DM** and the CENIC group. Testing Messaging on Low Nicotine Cigarettes to Correct Misperceptions. Tobacco Regulatory Science Conference. October 2020. Virtual conference.
- *3. **Carroll DM**, Stepanov I, O’Conner R, Luo XK, Cummings M, Rees V, Bickel WK, Shields P, Hatsukami DK. Impact of cigarette filter ventilation on biomarkers of tobacco-related exposure and biological effect and perceptions of harm. Society for Research on Nicotine and Tobacco Annual Meeting March 2020. New Orleans, LA.
4. **Carroll DM**, Soto C, Baezconde-Garbanati L, Huang LL, Lienemann BA, Meissner HI, Rose SW, Unger JB, Cruz TB. Tobacco Industry Marketing Exposure and Commercial Tobacco Product Use Disparities among American Indians and Alaska Natives. National Conference on Tobacco or Health Annual Meeting. August 2019. Minneapolis, MN.
5. **Carroll DM**, Strayer L, Bickel W, and Hatsukami D. An Experimental Tobacco and Nicotine Product Marketplace: A Platform for Testing Policies and Regulations. Society for Research on Nicotine and Tobacco Annual Meeting. March 2019. San Francisco, CA. [Presented by Hatsukami D due to Carroll maternity leave]
6. **Carroll DM**, Jensen J, Stepanov I, Murphy S, Hecht S, Lou X, Donny E, Hatsukami D. Perceived Health Risks and Biomarkers of Potential Harm among Natural American Spirit Brand smokers. Society for Research on Nicotine and Tobacco Annual Meeting. February 2018. Baltimore, MD.
7. **Mowls DS**, Boeckman L, Gillaspay T, Beebe LA. Impact of Helpline Fax Referral Program on Quit Outcomes. Graduate Research Education and Technology (GREAT) Symposium. March 2016. Oklahoma City, Oklahoma.

8. **Mowls DS**, Ganapathy V, Zhao D, & Queimado L. Influence of Clinical and Lifestyle Factors on DNA Damage in Head and Neck Cancer. Oral presentation at Otorhinolaryngology Research Day. April 2015. Oklahoma City, Oklahoma.
9. **Mowls DS**, Beebe LA. Unhealthy Behaviors Among Cancer Survivors. Graduate Research Education and Technology (GREAT) Symposium. April 2015. Oklahoma City, Oklahoma.
10. **Mowls DS**, Beebe LA. Long-Term Projections in Smoking-Attributable Lung Cancer By Gender. Society for Research on Nicotine and Tobacco Conference. February 2015. Philadelphia, PA.
11. **Mowls DS**, Beebe LA. Race Specific Trends in Invasive Lung Cancer, Oklahoma 2001-2010. Graduate Research Education and Technology (GREAT) Symposium. April 2014. Oklahoma City, Oklahoma.
12. **Mowls DS**, Beebe LA. Behavioral Risk Factors among Cancer Survivors in Oklahoma. Stephenson Cancer Center Research Symposium. January 2014. Oklahoma City, Oklahoma.
13. **Mowls DS**, Cheruvu VK, Zullo MD. HRQOL in Adults with COPD: Who is Still Smoking and Where Can Public Health and Clinical Medicine Intervene? American Public Health Association Annual Conference. November 2013. Boston, MA.
14. **Mowls DS**, Cheruvu VK, Zullo MD. Influenza Vaccination Rates in Adults with Chronic Obstructive Pulmonary Disease: the Impact of a Diagnostic Breathing Test. Poster Presentation at the Graduate Research Symposium at Kent State University. April 2013. Kent, OH.

Posters Presented at Professional Meetings, Conferences, etc.

- *1. **Carroll DM**, Cole A. U.S. representative examination of racial/ethnic group disparities in smoking behaviors, quit ratios, and cessation-related factors. Society for Research on Nicotine and Tobacco Annual Meeting. February 2021. Virtual conference.
- *2. Sherri Jean Katz, Lori Strayer, Eric C Donny, Dorothy Hatsukami and **Carroll DM**. U.S. representative examination of racial/ethnic group disparities in smoking behaviors, quit ratios, and cessation-related factors. Society for Research on Nicotine and Tobacco Annual Meeting. February 2021. Virtual conference.
- *3. Jennings D (Community Partner), Hatsukami D, and **Carroll DM**. Utilizing traditional tobacco to reframe what tobacco is and is not to promote commercial smoking cessation in Native Americans: rationale, partnership goals, and planned milestones. University of Minnesota Power of Partnerships Annual Conference. February 2021. Minneapolis, MN.
- *4. **Carroll DM**, Murphy S, Benowitz N, Strasser A, Kotlyar M, Hecht S, Carmella S, McClernon J, Dermody S, Vandrey R, Donny E and Hatsukami D. Relationships between

nicotine metabolite ratio and a panel of exposure and effect biomarkers. Society for Research on Nicotine and Tobacco Annual Meeting. March 2020. New Orleans, LA.

5. **Carroll DM**, Murphy S, Benowitz N, Strasser A, Kotlyar M, Hecht S, Carmella S, McClernon J, Dermody S, Vandrey R, Donny E and Hatsukami D. Relationships between nicotine metabolite ratio and a panel of exposure and effect biomarkers. Society for Research on Nicotine and Tobacco Annual Meeting. March 2020. New Orleans, LA.
6. **Carroll DM**, Dermody R, Denlinger-Apte R, Cassidy R, Allen AM, Smith T, Lindgren B, Pacek LR, Tidey JW, Donny E, and Hatsukami D. Does the optimal approach to nicotine reduction in cigarettes differ by race, gender, or education? Tobacco Centers of Regulatory Science Meeting. October 2019. Bethesda, MD.
7. **Carroll DM**, Rose SW, Unger JB, Soto C, Lienemann BA, Byron JM, Meissner HI, Huang LL, Baezconde-Garbanati L, Cruz TB. Pro- and Anti-Tobacco Marketing Aimed at Vulnerable Populations: A Systematic Review. National Conference on Tobacco or Health Annual Meeting. August 2019. Minneapolis, MN.
8. **Carroll DM**, Jensen J, Donny E, Hecht S, Murphy S, Lou X, Stepanov I, Hatsukami D. Exposure Biomarkers among Natural American Spirit Smokers. UMN PharmacNeuroImmunology (PNI) Annual Meeting. October 2018. Minneapolis, MN.
9. **Carroll DM**, Jensen J, Donny E, Hecht S, Murphy S, Lou X, Stepanov I, Hatsukami D. Toxicant and Inflammatory Biomarkers among Natural American Spirit Smokers. Masonic Cancer Center, Annual Cancer Research Symposium. March 2018. Minneapolis, MN.
10. **Carroll DM**, Jensen J, Donny E, Hecht S, Murphy S, Lou X, Stepanov I, Hatsukami D. Toxicant and Inflammatory Biomarkers among Natural American Spirit Smokers. Tobacco Centers of Regulatory Science Meeting. October 2017. Bethesda, MD.
11. **Carroll DM**, Wagener TL, Peck JD, Brame LB, Thompson DM, Stephens LD, Campbell JE, Beebe LA. Biomarkers of tobacco exposure in ENDS users, cigarette smokers, and dual users of American Indian descent. Association of American Indian Physicians Conference. August, 2017. Oklahoma City, Oklahoma. [Presented by Stephens LD]
12. **Mowls DS**, Wagener TL, Beebe LA. Electronic Nicotine Product Use, Cigarette Smoking, and Dual Use among American Indians in a Pilot Study. Society for Research on Nicotine and Tobacco Conference. March 2017. Florence, Italy.
13. **Mowls DS**, Martinez SA, Mushtaq N, Beebe LA. Current Cigarette Smoking and Tobacco Dependence among GED Recipients. Society for Research on Nicotine and Tobacco Conference. March 2017. Florence, Italy.
14. **Mowls DS**, Williams BM, Mushtaq N, Beebe LA. Policies, perceptions and polytobacco use. Society for Research on Nicotine and Tobacco Conference. March 2016. Chicago, IL.

15. **Mowls DS**, Carabin H. Hepatitis C Virus Transmission Among Injection Drug Users. Graduate Research Education and Technology (GREAT) Symposium. April 2015. Oklahoma City, Oklahoma.
16. **Mowls DS**, Brame LS, Beebe LA. Recent Trends in Tobacco-Related Cancer by Gender, Oklahoma. Stephenson Cancer Center Research Symposium. January 2015. Oklahoma City, Oklahoma.
17. **Mowls DS**, Cheruvu VK, Zullo MD. Factors Associated with Attempt to Quit Smoking among Adults with Chronic Obstructive Pulmonary Disease. American Public Health Association Annual Conference. November 2013. Boston, MA.
18. **Mowls DS**, Zullo MD, Cheruvu VK. Perceived Weight, not Body Mass Index: a Strong Predictor of Suicide Risk among US Adolescents. Society for Epidemiology Research Annual Meeting. June 2013. Boston, MA.
19. **Mowls DS**, Cheruvu VK, Zullo MD. Underutilization of spirometry in adults diagnosed with chronic obstructive pulmonary disease: who to target for improved clinical management. Society for Epidemiology Research Annual Meeting. June 2013. Boston, MA.
20. **Mowls DS**, Zullo MD, Cheruvu VK. Perceived Weight, not Body Mass Index: a Strong Predictor of Suicide Risk among US Adolescents. Poster Presentation at the Graduate Research Symposium at Kent State University. April 2013. Kent, OH.
21. **Mowls DS**, Cheruvu VK. Association Between Body Mass Index and Suicidal Thoughts and Attempts Among US Adolescents. American College of Epidemiology Annual Meeting. November 2012. Chicago, IL.

TEACHING AND CURRICULUM DEVELOPMENT

Collaborative Efforts and Activities University of Minnesota

Semester and Year	Course Number, Title	Academic Institution	Lecture Topic
*Spring 2021	PubH 6387: Cancer Epidemiology	U of M	<i>Addressing smoking-related cancers through epidemiology and community-based participatory research</i>
*Fall 2020	PubH 6162: Biomarkers	U of M	<i>Community-Based Biomarker Research and Best Practices for protecting Disadvantaged and Vulnerable groups</i>

*Fall 2020	PUBH 6074/ JOUR 5541: Mass Communication and Public Health	U of M	<i>Community based interventions</i>
*Fall 2020	PubH 8120: Occ and Env Health and Safety Seminar	U of M	<i>Combating Smoking Disparities through Epidemiology and Community Engagement</i>
*Spring 2020	PubH 6242; Cultural Humility with American Indian Populations	U of M	<i>Cultural Humility</i>
*Spring 2020	PubH 6243; American Indian Research, Evaluation & Collaborations	U of M	<i>Community-Based Participatory Research</i>
*Fall 2019	PubH 6162: Biomarkers	U of M	<i>Community-Based Biomarkers Research with Vulnerable Populations</i>

Outside University of Minnesota

Semester and Year	Course Number, Title	Academic Institution	Lecture Topic
*Spring 2021	Utilizing Mixed Methods in Health Communication Research	University of Pennsylvania	<i>Community-Based Participatory Research: Best Practices and Lessons Learned</i>
Summer 2018	CPH 7633, Public Health Strategies for Tobacco Control	University of Oklahoma Health Sciences Center	<i>Genetics and Smoking</i>
Spring 2017	BSE 6192, Grant Writing Skills in Epidemiology Public Health	University of Oklahoma Health Sciences Center	<i>NIH dissertation grants</i>
Spring 2017	BSE 5001, Problems in Biostatistics and Epidemiology	University of Oklahoma Health Sciences Center	<i>Measures of association</i>
Fall 2016	Introduction to Public Health	Langston University School of Nursing and Health Professions	<i>Public health research methods and statistics</i>
Summer 2016	CPH 7633, Public Health Strategies for Tobacco Control	University of Oklahoma Health Sciences Center	<i>Genetics and Smoking</i>
Spring 2016	BSE 5001, Problems in Biostatistics and Epidemiology	University of Oklahoma Health Sciences Center	one class on measures of association, two classes on study design, and one class on confounding
Fall 2015	BSE 5113, Principles of Epidemiology	University of Oklahoma Health Sciences Center	<i>Standardization</i>
Fall 2015	BSE 6363, Cancer Epidemiology	University of Oklahoma Health Sciences Center	<i>Lung cancer epidemiology, prevention, and treatment.</i>

	and prevention		
Spring 2015	BSE 5001, Problems in Biostatistics and Epidemiology	University of Oklahoma Health Sciences Center	one class on measures of association, two classes on study design, and one class on confounding

Faculty Development Activities regarding Teaching (Professional Development in Teaching)

Preparing Future Faculty Program, University of Minnesota, Fall 2018
GRAD 8101: Teaching in Higher Education

ADVISING AND MENTORING

School of Public Health Advisees

Master's Student Advisees

*Laura Dick (MPH executive program), advisor for field experience

Master's Committees Served on

*Laura Dick (MPH executive program)

Doctoral Committees Currently Serving On

*Ran Zhao (Epidemiology and Community Health)

*Chuyu Deng (Biostatistics)

*Aleksandra Alcheva (Environmental Health Sciences)

Other Mentoring Activities

*Undergraduate Psychology capstone requirement at University of Minnesota
 MacKenzie Differding (Fall 2020)

*Research Paper for Physiology Majors (PHSL 3062W)
 Ashley Gao (Fall 2020)

Masonic Cancer Center, University of Minnesota-Summer Student Program (2017-2019)
 Alana Goodson
 Camryn Franke
 Taylor Hammonds

University of Oklahoma Health Sciences Center mentoring to other students
 Lacy Brame, MS student
 Kristen Damphousse, undergraduate student

SERVICE AND PUBLIC OUTREACH

Service to the Discipline/Profession/Interdisciplinary Area(s)

Professional Service

Journal Reviewer Experience

- * American Journal of Public Health, since 2020
- * *International Journal of Environmental Research and Public Health*, since 2019
- * *Cancer Epidemiology, Prevention, and Biomarkers*, since 2019
- Nicotine & Tobacco Research*, since 2019
- Tobacco Regulatory Science*, since 2017

Committee Memberships

- * American Indian Cancer Foundation Community Oversight Group (COG), 2020-present
- * Scholarship and Development Subcommittee of the Society for Research on Nicotine and Tobacco (SRNT) SRNT Health Disparities Network, Co-Chair, 2021-present

Scholarship and Development Subcommittee of the Society for Research on Nicotine and Tobacco (SRNT) SRNT Health Disparities Network, Operations Coordinator, 2018-2021

Tobacco Centers of Regulatory Science (TCORS), Trainee and Vulnerable Populations Workgroup Member, 2018-2019

Organization of Conferences, Workshops, Panels, Symposia

- *Conference: *National Tribal Tobacco Conference 2021*
Purpose: Organize and plan a national conference dedicated to combating commercial tobacco use among American Indians
Role: Steering committee
- *Symposia: *Succeeding as women in nicotine and tobacco research*
Purpose: This interactive workshop will spotlight career advancement obstacles facing women in the field to facilitate solution-focused discussions for those navigating these challenges first-hand and for those hoping to better support women mentees and colleagues.
Presented at 2021 SRNT Conference
Role: Co-Chair
- *Symposia: *Where the Rubber Meets the Road: Culturally Tailored Tobacco Control Research and Interventions to Achieve Health Equity*
Purpose: This symposium will contribute to achieving health equity by providing attendees with an understanding of the barriers, facilitators, and best practices in conducting culturally tailored interventions to reduce tobacco use among several health disparity populations.
Presented at 2021 SRNT Conference
Role: Co-Chair

Other Service Experience

- Preparer of briefing notes for *Nicotine and Tobacco Research*, since 2018
- Abstract reviewer for *Society for Research on Nicotine and Tobacco*, since 2017

Service to the University/School of Public Health/Division

University of Minnesota

*Masonic Cancer Center Community Engagement Faculty Advisory Committee, 2019 - present

*Global Health Case Competition Judge, January 2020

School of Public Health

* Diversity, Equity, and Inclusion Action Alignment Team, Division representative

* Health Equity Faculty Networking Event, Co-Chair

Division

* Diversity, Equity, and Inclusion Faculty Committee, member

* Established and led a book club to promote discussion of antiracism