

Faculty Highlights 2022

December 2022

Publications

Zumach, G. M., Maxwell, W. D., & **Fierke, K. K.** (2022). Virtual Social Networking Hours: A Vital Personal and Professional Avenue for Connecting Pharmacy Leadership Educators. *INNOVATIONS in Pharmacy*, 13(4). <https://doi.org/10.24926/iip.v13i4.4831>.

Presentations

Stenehjem, D.D. and Bates, J. Moderated by Larson, B. *ASHP and University of Minnesota Pharmacogenomics Accelerator: Update from Inaugural Cohort*. ASHP Midyear Meeting. December 6, 2022. Las Vegas, NV. [Podium Presentation]

Jacobson, P. **Stenehjem DD**. *Novel Pharmacogenomic Education and Implementation Strategies*. Pharmacogenomics Global Research Network ([PGRN](#)), Best Practices Webinar. Dec 16, 2022 . [Webinar]

Waterhouse, D.M., Ray, S., Betts, K.A., Yuan, Y., Yin, L., Gao, S., Sundar, M., & **Stenehjem, D.** (2022). *60MO Real-world overall and progression-free survival for first-line immunotherapy-based regimens in advanced non-small cell lung cancer* (vol. 16, pp. 100165). *Immuno-Oncology and Technology*. [doi: 10.1016/j.iotech.2022.100165](https://doi.org/10.1016/j.iotech.2022.100165) (ESMO Immuno-Oncology Annual Congress; December 7-9, 2022; Geneva, Switzerland). [Abstract, Poster, and Oral Presentation]

Willis, C., Au, T., Griswold, C., Schabath, M., Thompson, J., Malhotra, J., Ko, G., Appukkuttan, S., Warnock, N., Kong, S., Hocum, B., Brixner, D., & **Stenehjem, D.** (2022). *CO118 TRK Inhibitor Treatment Patterns in Patients with NTRK Fusion-Positive Solid Tumors: A Multi-Site Cohort Study at U.S. Academic Cancer Centers* (12th ed., vol. 25, pp. S41). *Value in Health*. [doi: 10.1016/j.jval.2022.09.196](https://doi.org/10.1016/j.jval.2022.09.196) (ISPOR Europe; Vienna, Austria; November 6-9, 2022) [Abstract and Poster]

Willis, C., Sallman, D. A., Tan, M., Brendle, M., Williams, V. L., Comperatore, C., Au, T., Tantravahi, S. K., Al Ali, N., Gilreath, J. A., Kovacs, T., Cao, X., Sadek, I., Komrokji, R. S., & **Stenehjem, D.** (2022). *Treatments and Outcomes for Patients at Academic Cancer Centers with Myelodysplastic Syndrome (MDS) By Revised International Prognostic Scoring System (IPSS-R) Scores* (Supplement 1 ed., vol. 140, pp. 5291-5292). *Blood*. [doi: 10.1182/blood-2022-162622](https://doi.org/10.1182/blood-2022-162622) (64th ASH Annual Meeting; December 10-13, 2022; New Orleans, Louisiana). [Abstract and Poster]

Honors/Awards

Keri Hager was named to the Academy for Excellence in Clinical Practice. The academy serves as the highest recognition of excellence in the practice or provision of clinical care by a full time faculty member. Other incoming Academy members include Marshall Hertz Internal Medicine Medical School, Jody Lulich Internal Medicine School of Veterinary Medicine, Paul Tuite

Neurology Medical School.

Community Outreach

COVID-19/Influenza vaccination clinic at CHUM November 29, 2022. 21 COVID-19 vaccines administered, 9 influenza vaccines administered, 30 socks distributed. 30 vaccine education interactions.

Grant Awards

Nam Chul Kim (PI) Whole brain single-cell transcriptome analysis in a Drosophila model of amyotrophic lateral sclerosis and frontotemporal dementia, Wallin Neuroscience Discovery Fund (\$128,000)

November 2022

Community Outreach

COVID-19/Influenza vaccination clinic at the Center for Alcohol and Drug Treatment.

Nov 9, 2022 . 64 COVID-19 vaccines administered, 21 influenza vaccines administered, 50 COVID-19 test kits distributed, 200 education interactions. 200 vaccine education interactions.

Presentations

Klein, AH. Ion Channel Modulation Symposium 2022 – The United States. “KATP channels involvement in pain, opiate efficacy, tolerance and withdrawal”. New York, NY. November 6th, 2022. Host: Rajesh Khanna.

Johnson K, Doucette A, Hulke S, Mujteba S, Breske A, Klein, AH. Poster: “Loss of SUR1 subunits in astrocytes decreases hypersensitivity in neuropathic pain and opioid tolerance models in mice” Society for Neuroscience 2022, San Diego. CA. November 16th, 2022.

Demerath E, Hotop A, and Anderson GW. University of Minnesota Rural Collective. Presentation and discussion of the University of Minnesota Driven to Discover (D2D) initiative to bring data collection efforts to rural county fairs in Minnesota.

Willis C, Au T, Griswold C, Schabath MB, Thompson J, Malhotra J, Ko B, Appukkuttan S, Warnock N, Kong S, Hocum B, Brixner D, **Stenehjem D**. “Patterns in Patients with NTRK Fusion-Positive Solid Tumors: A Multi-Site Cohort Study at U.S. Academic Cancer Centers” ISPOR Europe. Vienna, Austria. November 6-9 2022. Abstract and Poster Presentation

Nam Chul Kim, CHCHD10S59L-induced ALS-FTD and potential therapeutics, CODR Research Conference, University of Minnesota, College of Pharmacy, Nov. 3, 2022.

Minwoo Baek, Yun-Jeong Choe, and Nam Chul Kim, Poster: FDA-approved PDE4 inhibitors reduce the dominant toxicity of ALS– FTD-associated CHCHD10S59L in Drosophila and human cells, Society for Neuroscience 2022, San Diego. CA. November 15th, 2022.

Okoro O (Panelist). Owens M, Thomas B. Part I of a 3-part vaccine mini-series: The Vax

Episodes. Duluth Story Project (podcasts). Accessible at <https://zeitgeiststarts.com/2022/10/26/the-vax-episodes-part-1/> Published October 26, 2022.

Okoro O (*Interviewee*) College of Pharmacy, MNovationRx Showcase: "The Road to Inclusivity: Our work in building equity in education and health". Broadcast of pre-recorded interview and livestream event on October 31, 2022.

Okoro O (*presenter*). Social Determinants of Care: Making the Case for Structural Experiential Education. Academic Health Center Seminar Series. November 04, 2022.

Okoro O (*Invited speaker*). Implicit bias in Healthcare: What our patient notes tell us . . . about us! Pharmacy Residency Academic Day/Retreat. November 04, 2022.

Okoro O (*presenter*). Supporting BIPOC students across the continuum of pharmacy training - What DEI looks like from over here! American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Podium*)

Okoro O (*presenter*), Kennedy J, Roberts R, Aremu T. COVID-19 impact on mental health, healthcare access and social wellbeing - a Black community case study. American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Roundtable*)

Okoro O (*presenter*). Implicit bias in Healthcare: What our patient cases and clinical notes tell us... about us! American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Roundtable*)

Singhal C (*student presenter*), **Okoro O** (*author*), Aremu T. Assessing public awareness of the malaria vaccine in India – Who knows and who needs to know? What our patient cases and clinical notes tell us . . . about us! American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Podium*)

Aremu T (*student presenter*), **Okoro O** (*author*), Singhal C. Assessing awareness and exploring public perception of the malaria vaccine in sub-Saharan Africa – Planning for targeted interventions. American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Podium*) American Public Health Association annual conference. November 06 – 09, 2022 | Boston MA. (*Podium*)

Honors/Awards

Kerry K. Fierke will be the CoP 2023 AACP Alternate Faculty Delegate. She will serve in this role January 1st through December 31, 2023, and then assume the role of Faculty Delegate for 2024.

Grant Awards

Moniz R (Co-I and grant writer, student pharmacist class of 2023), Stenehjem D (Co-I), Hanna K (PI), Pharmacist Intervention in Oral Chemotherapy: Minimizing Toxicity with Telemonitoring and the PRO-CTCAE™. Hematology Oncology Pharmacy Association. Research Award \$34,500

October 2022

Publications

Erin B. Bailey; **David D. Stenehjem** (2022) “Chapter e161: Renal Cell Carcinoma,” in, *DiPiro: Pharmacotherapy A Pathophysiologic Approach, 12e*. Edited by G. C. Yee. and L. Holle. McGraw Hill Medical.

Hooker SA, Essien IJ, Borgert-Spaniol CM, Rossom RC, **Olson AW**, Romagnoli KM, Solberg LI. (May 2022). Patient Perspectives on Opioid Risk Discussions in Primary Care. *Journal of Patient-Centered Research and Reviews*, 9(4)253-262. Available at <https://institutionalrepository.aah.org/jpcrr/vol9/iss4/2/>

Presentations

Olson AW, Maki H, Kempfert J, St. John R, Allen N, Rapps M. (Oct 2022). You Get What You Measure: Pursuing Health Equity Using a Participatory Approach when Evaluating a Community-Integrated Care Intervention. Presented at the 40th Annual St. Louis County Health and Human Services Conference, Duluth, MN.

Nam Chul Kim, Liquid-liquid phase separation in amyotrophic lateral sclerosis and frontotemporal dementia, Oct. 10, Mokpo National University, Mokpo, Korea (online)

Okoro, ON (Convener). Workplace Readiness for Engaging and Retaining a Diverse Healthcare Workforce. African Heritage COVID-19 Collaborative Call-to-Action Series. October 17, 2022 via zoom.

Anderson, GW, Palombi L, Katras MJ. (October 6, 2022). The power of partnerships: The ripple effects. University of Minnesota Extension All Program Conference. Duluth MN

Palombi L. (October 3, 2022). Naloxone to Reverse Opioid Overdose. Human Development Center All-Staff Training. Duluth, MN. (zoom)

Palombi L. (September 28, 2022). Naloxone to Reverse Opioid Overdose. Lake Superior College Student Wellness Day. Duluth, MN. (zoom)

Uk N, Moon J, Massey S, Walburg K, **Schweiss S**. “Enhancing Resident-Preceptor Relationships through Resiliency Discussions,” American College of Clinical Pharmacy Global Conference on Clinical Pharmacy, San Francisco, CA. (October 15, 2022).

Hager KD, Villa J, LaTulip J, Wirta S. Medications for Opioid Use Disorder: Talking with Patients, Families, and Colleagues about Facts vs. Fiction. St Louis County Health and Human Services Conference. Duluth, MN. (Oct 14, 2022).

Grant Submissions

Olson AW (PI), Peterson AL, Bradley K, Strasser M. (Jun 2023-Jun 2026) National Institute for Medical Respite and Recuperative Care – Behavioral Health Integration in Medical Respite Care for People Experiencing Homelessness. \$400,000

Nam Chul Kim (PI) and Daryl Gohl (co-PI), Wallin neuroscience discovery fund, \$100,000, Whole brain single-cell transcriptome analysis in a Drosophila model of amyotrophic lateral sclerosis and frontotemporal dementia

Nam Chul Kim (PI), NINDS, \$1,937,500, Molecular mechanisms of CHCHD10 S59L-induced amyotrophic lateral sclerosis and frontotemporal dementia

Grants Awarded

Grant Anderson and Abby Gold (PI) 10/30/2022-2/28/2023
University of Minnesota Extension Foundation through USDA \$10,000
Title: Education supported COVID-19 vaccination clinics in partnership with Opioid Treatment Programs in Minnesota and Wisconsin.

Grant Anderson (PI) 7/30/2022-6/28/2023
Our Community Our Health through CDC \$18,000
Title: Education supported COVID-19 vaccination clinics in partnership with Opioid Treatment Programs in Minnesota and Wisconsin.

September 2022

Publications

Oswald, M., Maxwell, W. D., **Fierke, K. K.**, Griffith, N., Davis, S. E., Catchings, E., Worrall, C. L., Grant, A. D., Magagnoli, J. & Bookstaver, P. B. (2022). Affective domain predictors of PharmD student pursuit of and successful matching for postgraduate pharmacy residency training. *American Journal of Health-System Pharmacy*, *zxac178*. <https://doi.org/10.1093/ajhp/zxac178>.

Aremu TO, Singhal C, Ajibola OA, Agyin-Frimpong E, Appiah-Num Safo AA, Ihekoronye MR, Nabirye SE, **Okoro ON**. Assessing Public Awareness of the Malaria Vaccine in Sub-Saharan Africa. *Tropical Medicine and Infectious Disease*. 2022 Sep;7(9):215.

Singhal C, Aremu TO, Garg P, Shah K, **Okoro ON**. Awareness of the Malaria Vaccine in India. *Cureus*. 2022 Sep 15;14(9).

Okoro, O., Vosen, E.C., Allen, K., Kennedy J., Roberts, R., Aremu, T. COVID-19 impact on mental health, healthcare access and social wellbeing – a black community needs assessment. *Int J Equity Health* **21**, 137 (2022). <https://doi.org/10.1186/s12939-022-01743-z>

Okoro ON, DeVuyst-Miller SA, MacDonald DA, Montague-Schafer KG, Periera CR, **Schweiss SK**, Yapel AM. Integrating social determinants into pharmacotherapy courses: A case-based learning approach. *Currents in Pharmacy Teaching and Learning*. <https://doi.org/10.1016/j.cptl.2022.09.023> Available online 23 September 2022

Presentations

Fierke, K. K. & Lepp, G. A. Difficult conversations and conflict management: 3 strategies to help you enjoy your rotation (even more). Palmetto Experiential Education Partnership (PEEP)

Preceptor Development Series, University of South Carolina College of Pharmacy and Medical University of South Carolina, Virtual, August 2022.

Palombi, L. C., Bhuiyan, J., American Pharmacists Association Hot Topics Webinar, "The Battle Against Social Determinants of Health and Disparities in Pain Management, Part 2," American Pharmacists Association. (September 21, 2022).

Palombi, L. C., Medina, S. (Author & Presenter), Engagement Scholarship Consortium Annual Meeting, "Relentless Stigma: A Qualitative Analysis of a Substance Use Recovery Needs Assessment," Engagement Scholarship Consortium, Athens, Georgia, United States. (September 21, 2022).

Palombi, L. C., Engagement Scholarship Consortium Annual Meeting, "Pechuchka: Unrelenting Stigma: What We've Learned from Years of Community-Engaged Substance Use Research in Minnesota," Engagement Scholarship Consortium, Athens, Georgia, United States. (September 21, 2022).

Appiah-Num A. (*author/presenter*), **Okoro, O.** (*author*). Perceptions of Clinical Pharmacy Roles among Healthcare Practitioners in Ghana. 80th FIP World Congress of Pharmacy and Pharmaceutical Sciences · Seville, Spain. September 18 – 22, 2022. [Poster presentation]

Appiah-Num A. (*author/presenter*), **Okoro, O.** (*author*). Pharmacists' involvement in the prevention and chronic management of hypertension in Low-Middle Income Countries (LMICs): A case study of Ghana. 80th FIP World Congress of Pharmacy and Pharmaceutical Sciences · Seville, Spain. September 18 – 22, 2022. [Poster presentation]

Appiah-Num A. (*author/presenter*), **Okoro, O.** (*author*). Challenges in the Integration of Clinical Pharmacy Practice in Patient Care in Ghana. 80th FIP World Congress of Pharmacy and Pharmaceutical Sciences · Seville, Spain. September 18 – 22, 2022. [Poster presentation]

Okoro O. (*Invited speaker*). Racism & Inequities in Healthcare - *What we know and what we can do*. Generations Health Care Initiatives Board of Directors Annual Meeting. September 15, 2022

Community Engagement

St. Louis County Public Health, Lighthouse Center for Vital Living, Our Community Our Health, and **Grant Anderson** hosted COVID-19 vaccine clinics at the Center for Alcohol and Drug Treatment (August 31) and the University of Minnesota COVID-19 vaccine clinic (August 29). 40 COVID-19 vaccine doses administered and over 100 people engaged in vaccine education activities.

Grant Submissions

NIH Clinical and Translational Science Award RC3 mechanism (high impact interdisciplinary science). This is a pre-proposal for internal selection by the UMN CTSA. The UMN is allowed 2 RC2 submissions and only institutions with CTSA's are allowed to compete for these grants. *Enhancing University Research Engagement with Rural Communities*. Principal Investigators: **Grant Anderson**, Ellen Demerath, Carrie Henning-Smith, Cathy McCarty, Logan Spector

The critical gap this project aims to address is outreach to rural Minnesota and increased representation of rural residents in research. This infrastructure resource would provide a unique opportunity for active engagement and communication between UMN researchers and rural residents.

Awarded Grants:

Palombi & Hager, Consultants:

1H79TI085594-01

Park-Mroch, J (PI)

9/30/2022-9/29/2023

SAMHSA

\$650,000

Title: Training and technical assistance addressing opioid and stimulant misuse affecting rural communities in the Great Lakes Region Collaborative project with the University of Minnesota, University of Illinois, Purdue University, Michigan State and University of Wisconsin (PI).

The proposed project builds upon three years of work by University of Minnesota Extension and its partners, funded by three separate but complementary grants. The overarching goal of the three current grants is to identify areas for improvement that will support sustained recovery, reduce opioid and stimulant abuse/misuse, promote evidence-based public health practice, treatment and harm reduction, and create/deliver educational resources in response to those identified areas of improvement.

August 2022

Publications

Johnson K, Doucette A, Edwards A, Verdi A, McFarland R, Hulke S, Fowler A, Watts VJ and **Klein AH** (2022), Reduced activity of adenylyl cyclase 1 attenuates morphine induced hyperalgesia and inflammatory pain in mice. *Front. Pharmacol.* 13:937741. doi: 10.3389/fphar.2022.937741

Bloomquist, C., Bergland, D., Speranza, C. & **Fierke, K. K.** (2022). A letter writing assignment for leadership development: Creating stakeholder connection for policy advocacy. *Journal of Leadership Education*, 21(3). DOI: 10.12806/V21/I3/R1.

Maxwell, W. D., **Fierke, K. K.** & Zumach, G. M. (2022). A Virtual “Think Tank” to Establish Collaborative Leadership Initiative Plans (“CLIPs”). *INNOVATIONS in Pharmacy*, 13(2). <https://doi.org/10.24926/iip.v13i2.4300>.

Presentations

Janetski B, Ray ME, Martin BA, Lebovitz L, **Stratton TP**. “Calling All Villagers! How a Team-based and Data-driven Academic Early Warning System Should Work.” American Association of Colleges of Pharmacy Special Session. Pharmacy Education 2022 - Annual Meeting of AACP, Grapevine, TX; July 25, 2022. (Invited panelist.)

Sunna Mujteba and **Amanda Klein**. “ATP-Sensitive potassium channel subunit expression in naive and opioid tolerant mice.” Chemistry and Biochemistry Summer Undergraduate Research Program (SURP) and Biology Undergraduate Research in Science and Technology (BURST) Poster Fair. University of Minnesota. Aug 5, 2022

Belle A. Meyer, Kayla Johnson, Val J. Watts, Daniel P. Flaherty, **Amanda H. Klein**. “Novel AC1 Inhibitors Decrease Mechanical Hypersensitivity in Mouse Model of Inflammatory Pain” REU Poster Symposium. University of Minnesota. Aug 11, 2022

Minwoo Baek, Yun-Jeong Choe, **Nam Chul Kim** “FDA-approved PDE4 inhibitors reduce the dominant toxicity of ALS–FTD-associated CHCHD10S59L in Drosophila and human cells”, International research conference on neurodegenerative diseases 2022, Omaha, Nebraska, July 19, 2022 (invited speaker)

Anna Gross and **Nam Chul Kim**. “Evaluating saRNAs as Drug Candidates for Treatment of ALS-FTD and Parkinson’s Disease” REU Poster Symposium. University of Minnesota. Aug 11, 2022

Nam Chul Kim, “Mitochondrial pathogenic pathways in amyotrophic lateral sclerosis and frontotemporal dementia”, 51th Annual meeting of Korean Drosophila Society (online). July 4th, 2022 (Invited speaker)

Nam Chul Kim “Modeling neurodegenerative diseases using Drosophila melanogaster”, Summer Lecture Series, Harbin Institute of Technology, China (online), Aug 7-8, 2022

Okoro, O., Arya, V. The Complexity of Patient Cases: Simplifying How We Approach Identities. AACP Teacher Seminar, AACP Annual Conference. Grapevine TX. [*Invited Speaker*] Section: Diversity, Equity, and Inclusion | 12:45 p.m.–1:30 p.m. | July 23, 2022.

Okoro, O., Arya, V. The Complexity of Patient Cases: Simplifying How We Approach Identities. AACP Teacher Seminar, AACP Annual Conference. Grapevine TX. [*Invited Speaker*] Section: Experiential/Small-Group Teaching | 12:45 p.m.–1:30 p.m. | July 23, 2022.

Okoro, O., Jonkeman L., Sias, J. Preparing Pharmacists for a Diverse World: Incorporation of Patient Populations into Clinical Cases and Beyond. AACP Annual Conference. Grapevine TX. July 25, 2022. [*Invited Speaker*]

Lewis R.A., Dang T., Johnson B., **Stenehjem D.D.** Rate of hospitalizations after first dose of a fluoropyrimidine: implications for drug-gene interactions. SCOPE/REU Poster Symposium. University of Minnesota. Aug 11, 2022

Moderator: Sorensen, T. Faculty Experts: Jacobson, P., **Brown, J.**, **Stenehjem D.D.** Catalyzing Application of Pharmacogenomics in a Precision-Directed World. [MNOvationRx Showcase](#), College of Pharmacy, University of Minnesota. Aug 15, 2022. (virtual)

Honors/Awards

Olson AW. Research on Emerging Areas Critical to Human Health (REACH/NIH L70) – National Institutes of Health, National Institute of Drug Abuse (\$100,000 of educational loans repaid over 2 years)

Palombi, L (PI, Project Director), Wirta, A (Co-I). A Partnership with the Grand Portage Tribal Nation in Opioid-Focused Prevention, Treatment and Recovery. Funder: HRSA Amount: \$1,000,000.00 Dates: 9/1/2022-8/30/2025

Summary: The proposed project involves a diverse consortium of individuals and agencies with a deep dedication to supporting culturally- appropriate opioid-focused prevention, treatment and recovery with the Grand Portage Band of Lake Superior Chippewa, the Sawtooth Mountain Clinic, and Cook County Public Health. The consortium includes Grand Portage professionals and community members, Sawtooth Mountain health professionals and treatment professionals, a diverse group of social scientists, recovery professionals, and community educators who focus on harm reduction.

Jacob Brown was elected President-Elect of the ACCP PK/PD/PG PRN for 2022-2023

Community engagement

St. Louis County Public Health, Lighthouse Center for Vital Living, Our Community Our Health, and **Grant Anderson** hosted COVID-19 vaccine clinics at the Center for Alcohol and Drug Treatment (July 26), South St Louis County Fair (Proctor, MN July 27-29), North St Louis County Fair (Chisholm, MN August 3-5), and Central St Louis County Fair (Meadowlands, MN August 21). 114 COVID-19 vaccine doses administered and over 350 people engaged in vaccine education activities.

July 2022

Publications

*Butler, T., **Brown, J.**, Jacobson, P.A. and **Stenehjem, D.** (2022) "Perceptions of pharmacogenetic exceptionalism and the implications for clinical management within an electronic health record," Clinical and Translational Science [Preprint]. Available at: <https://doi.org/10.1111/cts.13360>.*

Jared Van Hooser, Stephanie Swanson, Jeannine Conway, **Jacob T. Brown**. (2022) Assessing pharmacy students' baseline tolerance for ambiguity, burnout, empathy, quality of life, and stress. *Currents in Pharmacy Teaching and Learning*. [Accepted]

Presentations

Okoro, Olihe. (Invited Speaker) Race in Patient Cases - *To do or not to do?* Lunch & Learn Series. Virginia Commonwealth University, School of Pharmacy. June 23, 2022. (via zoom)

Esposito, E. R., Fierke, **K. K.**, **Lepp, G. L.** & Schullo-Feulner, A. M. Enhance cognitive connection between basic science and pharmacy practice. American Association of Colleges of Pharmacy Annual Meeting. Dallas, Texas, July 2022. Poster presentation.

Maxwell, W. D., **Fierke, K. K.**, Baker, J. L., Fabel, P. H. & Blake, B. W. Implementation of an Experiential Rural Health Leadership Initiative to Expand Collaboration, Entrepreneurship, and Leadership. American Association of Colleges of Pharmacy Annual Meeting. Dallas, Texas, July 2022. Poster presentation.

Fierke, K. K., Lepp, G. A., Esposito, E. R. & Schullo-Feulner, A. M. Overcome post-pandemic classroom fatigue: Create a space where students lead their learning. AACP Leadership Development Special Interest Group Virtual Symposium. June 2022.

Lepp, GA, Funk, K, Janke, KK, Varin, J, Sorensen, TD. *PED-Rx: Using the TEDx Model to Bridge Education and Practice*. American Association of Colleges of Pharmacy Annual Meeting. July 2022. Poster presentation.

Bacci J, **Hager KD,** Cone C, Sorensen TD. *Two Parts Pedagogy, One Part Implementation Science: A Recipe for Assuring Patient Care Process Competency*. American Association of Colleges of Pharmacy Annual Meeting. July 2022. Special Session.

June 2022

Presentations

Cranmer, L.D., Razak, A.R.A., Ratan, R., Choy, E., George, S., Liebner, D.A., **Stenehjem, D.D.** and Gounder, M.M. (2022) “Results of a phase I dose escalation and expansion study of tegavivint (BC2059), a first-in-class TBL1 inhibitor for patients with progressive, unresectable desmoid tumor.” *Journal of Clinical Oncology*, 40(16_suppl), pp. 11523–11523. doi:10.1200/jco.2022.40.16_suppl.11523. Abstract, Poster and Selected for Oral Discussion (top 12 posters in Sarcoma track) at the ASCO Annual Meeting; June 3-7, 2022; Chicago, IL, USA. doi: [10.1200/JCO.2022.40.16_suppl.11523](https://doi.org/10.1200/JCO.2022.40.16_suppl.11523)

Heitlage V, Farley JF, Shah R, Tyagi H, **Stenehjem D.** (2022). “Post-Marketing Adverse Events of Oncology Medications with Breakthrough Therapy Designation Correlated with Time on Market and Market Share” Abstract and [Poster](#) at 2022-05, ISPOR 2022, Washington, DC, USA

Okoro, O. Addressing Health Equity and Diversity through the Pharmacy Lens. Invited speaker at the American Public Health Association (APHA) Pharmacy Section Midyear Meeting. June 08, 2022 [via zoom].

Okoro, O. Inclusion of race/ethnicity in patient cases – *To do or not to do*. Invited speaker at Midwestern University Faculty Development Webinar. June 15, 2022 [via zoom].

Honors/Awards

Tim Stratton’s Big 10 Pharmacy Assessment Collaborative team received the AACP Assessment SIG’s Collaborative Publication Award for their Commentary: “Academic Early Warning and Intervention Takes a Village.” (*Am J Pharm Educ.* 2022(April 1). [Article 8743](#)). Co-authors B Janetski (WI), ME Ray (IA), MC Higginbotham (OSU), L Lebovitz (MD), BA Martin (WI)

Grant Submissions

Klein, Amanda H (PI), “Development of novel KATP Channel Prodrugs as Analgesics to Treat Chronic Pain.” National Institute of Neurological Disorders and Stroke. Total: \$1,158,101, Direct: \$750,000 (Submitted)

Kim, Nam Chul (PI), “Ubiquitin dependent pathways in amyotrophic lateral sclerosis and frontotemporal dementia”, NIA/NINDS. Total: \$426,251, Direct: \$275,000 (Submitted)

May 2022

Publications

Little MM, Johnson L, **Hager K**. A discussion of White fragility to facilitate cultural competence development in a foundations of pharmaceutical care class. *Currents in Pharmacy Teaching and Learning*. Published online May 18, 2022. doi:[10.1016/j.cptl.2022.04.001](https://doi.org/10.1016/j.cptl.2022.04.001)

Hooker SA, Essien IJ, Borgert-Spaniol CM, Rossom RC, **Olson AW**, Romagnoli KM, Solberg LI. (May 2022). Patient Perspectives on Opioid Risk Discussions in Primary Care. *Journal of Patient-Centered Research and Reviews*, in press.

Schommer JC, Lee S, **Olson AW**, Gaither CA, Schondelmeyer SW. (May 2022). The 2021 Minnesota Pharmacist Compensation and Labor Survey. *Minnesota Pharmacist*, 75 (2). Retrieved from https://www.mpha.org/page/journal_22_winter

Medina, S (Graduate Student) (Lead Author), **Hager, K. D.**, Elstad, B., Tomaszewski, R. (Trainee), Becher, E., Van Deelen, A. (Trainee), Chen, N. (Trainee), & **Palombi, L.** Relentless Stigma: A Qualitative Analysis of a Substance Use Recovery Needs Assessment. *Substance Abuse: Research and Treatment*. [In press: 2022]

Presentations

Fierke, K. K., Lepp, G. A., Schullo-Feulner, A. M. & Esposito, E. R. Connect the dots: Help enhance students’ cognitive connection between basic science and pharmacy practice. Best Practices in Health Sciences Education Conference, Minneapolis, Minnesota. May 2022.

O'Donnell, C. (Resident), **Schneiderhan, M. E.**, **MacDonald, D.**, **Yapel, A.**, Renier, C., Jackson, S. (Professional Student), Nelson Albee, J., **Hager, K. D.**, College of Psychiatric and Neurologic Pharmacists Annual Meeting, "Bridging Community Mental Health and Primary Care to Improve Medication Monitoring and Outcomes for Patients with Mental Illness Taking Second-Generation Antipsychotics: Results of a Quality Improvement Initiative over 15 Months," San Antonio, Texas. (April 2022).

Hager, K. D., LaTulip, J., LaRue, O., Care Coordination Roundtable, "Helping Patients with Addiction...While Helping Yourself Get Through the Day," Wilderness Health, [Zoom], Minnesota. (May 19, 2022).

Hager, K. D., University of Minnesota Extension Webinar Series, "Medications for Opioid Use Disorder (MOUD/MAT): Talking with clients, families, and colleagues about facts versus fiction," SAMHSA, Minnesota. (April 22, 2022).

Okoro, O. (panelist). “BIPOC healthcare providers and their experiences navigating the healthcare realm and their identity”. Panel co-hosted by the University of Minnesota BIPOC Health

Professional Student Collective and Physical Therapy Diversity, Equity, and Inclusion club. Via Zoom. (April 21, 2022)

Okoro, O. (Collaborator/Co-convenor) Health Equity Summit - "Examining the Issues and Promoting Solutions". Via Zoom. (May 18, 2022)

Palombi, L. C., University of Minnesota Extension Webinar Series, "Harm Reduction 101," University of Minnesota Extension. (May 18, 2022).

Palombi, L. C., Metropolitan Professional Pharmacists Society Monthly Meeting, "The University's Role in Substance Use Disorder Leadership Post-COVID: Using Qualitative, Community-Based Input to Steer Our Efforts," MPPS, Minnesota. (May 17, 2022).

Palombi, L. C., Schaffer, D. @., Instagram Live, "Opioid Overdose Emergency - How to Protect your Teens," Med-IQ. (May 10, 2022).

Palombi, L. C., Grand Rapids Area Naloxone Training (zoom), "Naloxone to Reverse Opioid Overdose," Itasca County Public Health. (May 17, 2022).

Palombi, L. C., Gurno, M., Bilden, B., Bethel/Port Naloxone Training, "Naloxone to Reverse Opioid Overdose," Duluth, Minnesota. (May 3, 2022).

Palombi, L. C., University of Minnesota Extension Webinar Series, "Opioid Overdoses: Risk Factors, Signs and Saving Lives!." (May 19, 2022).

Klein, A.H. Johnson, K., Fisher, C., Sanrati A., Moore, M., Janecek, J.L., Graham, M.L., K_{ATP} Channels Function in the Peripheral and Central Nervous Systems in a Mouse Model of Type 2 Diabetes. US Association for the Study of Pain. Cincinnati, OH. United States and Online. (May 19, 2022).

Schweiss S, Massey S, Walburg K, Moon J. "The Impact of Resilience Discussions on Resident-Preceptor Relationships," University of Minnesota Best Practices in Health Sciences Education, Minneapolis, MN. (May 5, 2022).

Honors/Awards

Heather Blue has been promoted to Associate Professor. Congratulations Heather!

Trang Dang (advisor David Stenehjem) was awarded the 2022 Annette Boman Women's Fellowship Award for 2022 (\$4000)

Laura Palombi's team of authors was awarded the AACP Substance Use Disorder SIG Best Paper Award for their paper: Skrabal, M., Koh-Knox Sharpe, C., Palombi, L., Tiemeier, A., Walker, P., Devine, T., Spencer, S., Coover, K., & Tran, T. **A Multi-Site Qualitative Study Examining Student Perspectives of the Opioid Crisis.** American Journal of Pharmaceutical Education Apr 2021, 8515; DOI: 10.5688/ajpe8515.

Jared Van Hooser was voted as professor of the class 2022 (Duluth)

Jared Van Hooser was voted as professor of the semester, class of 2024 (Duluth)

Katie Oja was voted as P1 professor of the year (Duluth)

Grant Submissions

Nam Chul Kim: UMN Grant-in-aid (Bridge), awarded, \$30,000, from July 2022 to Jan 2024.

Mitochondrial pathogenic pathways in amyotrophic lateral sclerosis and frontotemporal dementia

Amanda H Klein (PI, submitted): DoD, “Metabolomic analysis of diabetic rodents and non-human primates to improve the understanding of the basic mechanisms of neuropathic pain” January 2023-December 2026

Total: \$2,180,558; Direct: \$1,408,770

April 2022

Publications

Rivers, Z.T., Parsons, H.M., Jacobson, P.A., Kuntz, K.M., Farley, J.F. and **Stenehjem, D.** (2022) “Opportunities for personalizing colorectal cancer care: an analysis of SEER-medicare data,” The Pharmacogenomics Journal, pp. 1–12. [doi:10.1038/s41397-022-00276-6](https://doi.org/10.1038/s41397-022-00276-6).

Kosobuski, L., Hawn, A., France, K., Chenn, N. S.-Y., LaPlante, C. & **Palombi, L.** (2022). Using Qualitative, Community-Based Input to Steer Post-COVID-19 Pharmacy Practice in Substance Use. *Journal of the American Pharmacists Association*.

[https://www.japha.org/article/S1544-3191\(22\)00086-3/fulltext](https://www.japha.org/article/S1544-3191(22)00086-3/fulltext)

Presentations

Blue, H. What’s new in COVID treatment? APRN Coalition Spring Pharmacology Conference. Apr 15, 2022 .

Olson AW, Rapps M, Allen N, St. John R, Harry M, Waring S, et al. (Apr 2022) Advancing Health Equity using a Participatory Approach to Community-integrated Care in Health-related Social Needs Interventions. Podium presented at the 28th Annual Health Care Systems Research Network Conference, Pasadena CA.

Anderson H, **Olson AW**, Kern M, Wright E. (Apr 2022) Prevalence of Medications- or Pharmacy-related HCSR Abstracts over Three Years. Poster presented at the 28th Annual Health Care Systems Research Network Conference, Pasadena CA.

Hooker S, **Olson AW**, Essien I, Borgert-Spaniol C, Rossom R, Romagnoli K, Solberg L. (Apr 2022) Perspectives from Patients at High-risk for Problems with Opioids about Discussing Opioid Risks with Primary Care Clinicians. Poster presented at the 28th Annual Health Care Systems Research Network Conference, Pasadena CA.

Cranmer, L., Razak, A., Ratan, R., Choy, E, George, S., Liebner, D., **Stenehjem, D.D.**, Gounder, M. A phase I dose escalation study of a tegavivint (BC2059) a first-in-class TBL1 inhibitor for patients with progressive, unresectable desmoid tumor. Abstract and Poster presentation at the AACR Annual Meeting; New Orleans, Louisiana; April 8-12, 2022.

Ilham, S., Willis, C., Kim, K., Chung, K., Wood, B., Tan, M., Nguyen, D., Brixner, D. and **Stenehjem, D.** (2022) “EPR22-109: Cancer Incidence in Immunocompromised Patients,” Journal of the National Comprehensive Cancer Network, 20(3.5), pp. EPR22-109. doi:10.6004/jnccn.2021.7168. Abstract and Poster presentation at the NCCN Annual Conference March 31, 2022 – Saturday, April 2, 2022, Shingle Creek, Orlando, FL.

Watanabe, A.H., Willis, C., Pavilack-Kirker, M., Lam, C., Park, L., Mehta, S., Kwong, J., Chhibber, A., Bauer, H., Ilham, S., Brixner, D. and **Stenehjem, D.** (2022) “CLO22-090: Patient Characteristics, Treatment Patterns, and Clinical Outcomes of Patients With Advanced HER2-Low Breast Cancer,” Journal of the National Comprehensive Cancer Network, 20(3.5), pp. CLO22-090. doi:10.6004/jnccn.2021.7276. Abstract and Poster presentation at the NCCN Annual Conference March 31, 2022 – Saturday, April 2, 2022, Shingle Creek, Orlando, FL.

Palombi, L. C., AHC Duluth Research Seminar Series (zoom), "Relentless Stigma: What We've Learned from Years of Community-Engaged Substance Use Research in Minnesota," AHC Duluth. (April 13, 2022).

Palombi, L. C., Gurno, M., Fond du Lac Tribal and Community College Naloxone Training, "Naloxone to Reverse Opioid Overdose: A Community-Engaged Training," Fond du Lac, Minnesota. (April 12, 2022).

Palombi, L. C., University of Minnesota Extension Webinar Series (zoom), "Harm Reduction 101," University of Minnesota Extension. (April 12, 2022).

Palombi, L. C., University of Minnesota Extension Webinar Series (zoom), "Opioid Overdoses: Risk Factors, Signs and Saving Lives!," University of Minnesota - Extension. (April 6, 2022).

Palombi, L. C., Gurno, M., Bilden, B., UMD Medical School and Pharmacy School Naloxone Training, "Naloxone to Reverse Opioid Overdose: A Community-Engaged Training," Fond du Lac, Minnesota. (April 14, 2022).

Okoro, O. Cultural & Structural Competency Workshop for Phillips Neighborhood Clinic (PNC) Interprofessional student volunteer workforce [*Pharmacy, Medicine, Occupational therapy, Physical therapy, Public Health, Nursing, Social Work, etc.*] [Cohort 1](#) (n = 65) - March 16, 2022

Okoro, O. Cultural & Structural Competency Workshop for Phillips Neighborhood Clinic (PNC) Interprofessional student volunteer workforce [*Pharmacy, Medicine, Occupational therapy, Physical therapy, Public Health, Nursing, Social Work, etc.*] [Cohort 2](#) (n = 84) - March 21, 2022

Okoro, O. Diversity, Equity & Inclusion (DEI) in Case-based Learning & Experiential Education.

University of Minnesota, College of Pharmacy *Clinical Seminar Series*. April 13, 2022.

Honors/Awards

Dr. Heather Blue was appointed onto the St. Louis County Opioid Remediation Settlement Committee.

Dr. Heather Blue was elected Minnesota Society of Health Systems Pharmacists -Arrowhead Chapter President-Elect for 2022-2023.

The College of Pharmacy, Duluth received the St. Louis County Public Health Partnership Award.

Sunna Mujteba (undergraduate) was awarded a Summer Undergraduate Research Program Award to work in the lab of Dr. Amanda Klein (2022)

Marissa Harle (PD1) was awarded a Summer Melendy Research Scholarship to work in the lab of Dr. Amanda Klein (2022)

Nyika Friberg (YR1 Medical Student) was awarded a Summer Research Program Award to work with Olihe Okoro (2022)

Media Contributions

Klein AH. [Interview] “[Cytokine Signaling Comes to the Fore in Inflammatory Itch Disease](#)” Pain Research Forum. February 24th, 2022.

Olson AW. [Interview] “[Medical respite provides a place for unhoused people to land after a hospital stay](#).” National Public Radio - Marketplace Morning Report. March 30, 2022.

Stenehjem DD [Podcast] “[A Closer Look Into the New Pharmacogenomics Accelerator Program](#)” ASHP Podcasts-Innovation Friday. Broadcast Date: April 8, 2022

March 2022

Publications

Erstad BL and **Stratton TP**. The Importance of Teaching Ethics in Pharmacy Education. *Am J Pharm Educ*. 2022(Feb);86(2). Article 8503. DOI: <https://doi.org/10.5688/ajpe8503>.

Olson AW, Isetts BJ, **Stratton TP**, Vaidyanathan R, Hillman LA, Schommer JC. (Mar 2022) An exploratory QUALqun comparison for patient-centeredness priorities in outpatient care for patient and pharmacists. *Journal of the American College of Clinical Pharmacy*. Advance online publication. [doi: 10.1002/jac5.1618](https://doi.org/10.1002/jac5.1618)

Presentations

Fierke, K. K. Navigating the wilderness: Tales of leadership. University of South Carolina College of Pharmacy. Columbia, SC, February 2022.

Fierke, K. K. Navigating the wilderness: Tales of leadership. Presbyterian College School of Pharmacy. Clinton, SC, February 2022.

Fierke, K. K. Adapting to changing environments. Presbyterian College School of Pharmacy. Clinton, SC, February 2022. Workshop.

Fierke, K. K. Establishing a team-focused thriving climate. Presbyterian College School of Pharmacy. Clinton, SC, February 2022. Workshop.

Palombi, Laura. Testimony in support of House File 2768 (Senate File 2678), Minnesota House of Representatives Health, Finance and Policy Committee. Medication Administration & External Monitoring Device Placement, March 8, 2022. *The bill would allow pharmacists to administer prescribed injectable medications through subcutaneous (SQ) or intramuscular (IM) routes and allow pharmacists to place external drug monitoring devices on patients.*

Palombi, L. C., Gurno, M., Bilden, B. Northeastern Minnesota Treatment Courts Naloxone Training (Zoom), "Naloxone to Reverse Opioid Overdose," Northeast Minnesota Treatment Courts, (February 23, 2022).

Okoro, O. N., College of Pharmacy, PLS 5th Annual Leadership Symposium: Servant Leadership. February, 26, 2022. (Invited speaker)

Okoro, O., Paleyo-Woodward, S., Han, I., Onchwari, J. *"Finding sisterhood in a distant land": Community-based Social Support that enhances Well-being for Women of Color in Academia.* UMD Summit on Equity, Diversity & Race. March 02, 2022

Okoro, O., Paleyo-Woodward, S., Han, I., Onchwari, J. *"Finding sisterhood in a faraway land": Community-based Social Support critical for Well-being of Women Faculty of Color.* Keeping our Faculty Symposium, Institute for Diversity, Equity, and Advocacy (IDEA), University of Minnesota. March 04, 2022.

Okoro, O. Implicit bias in Healthcare: What our patient notes tell us... about us!. COP Residency Academic Day. March 11, 2022

Honors/Awards

Association of Colleges of Pharmacy (ACCP) - 2021-2022 ACCP Leadership Development Special Interest Group Best Poster Award, for the poster entitled, "Teaching Conflict Management: Customizing Content to Increase Value, Confidence, and Ability during a Pandemic."

Kim Jones, PharmD, BCPS - Union University College of Pharmacy;

Kerry K. Fierke, EdD - University of Minnesota College of Pharmacy; and

Gardner A. Lepp, PhD - University of Minnesota College of Pharmacy

The LD SIG Poster Award recognizes a recently presented Leadership Development-related poster demonstrating excellence.

Laura Palombi is the recipient of the "Pharmacy Alumni Society 2022 Mentor of the Year Award."

Media Contributions

Olson AW [Interview]. "Medical respite provides vital care to people experiencing homelessness," Minnesota Public Radio News. [Medical respite provides vital care to people experiencing homelessness | MPR News](#) (Mar 2022)

Stenehjem [Interview]. "The Rise of Precision Prescribing," Inside Precision Medicine <https://www.insideprecisionmedicine.com/topics/patient-care/the-rise-of-precision-prescribing/> (Feb 2022)

February 2022

Publications

Olson AW, Schommer JC, Mott DA, Adekunle O, & Brown LM. Financial Hardship from Purchasing Prescription Drugs among Older Adults in the US before, during, and after the Medicare Part D 'Donut Hole': Findings from 1998, 2001, 2015, & 2021. *Journal of Managed Care & Specialty Pharmacy*. Article in press.

Olson AW, Isetts BJ, **Stratton TP**, Vaidyanathan R, **Hager KD**, & Schommer JC. (Feb 2022). Addressing Hidden Curricula that Subvert the Patient-Centeredness "Hub" of the Pharmacists' Patient Care Process "Wheel." *American Journal of Pharmaceutical Education*. 86(2).

Willis, C., Bauer, H., Au, T.H., Menon, J., Unni, S., **Tran, D.**, **Rivers, Z.**, Akerley, W., Schabath, M.B., Badin, F., Sekhon, A., Patel, M., Xia, B., Gustafson, B., Villano, J.L., Thomas, J.-M., Lubinga, S.J., Cantrell, M.A., Brixner, D. and **Stenehjem, D.D.** (2022) "Real-world survival analysis by tumor mutational burden in non-small cell lung cancer: a multisite U.S. study," *Oncotarget*, 13(1), pp. 257–270. [doi:10.18632/oncotarget.28178](https://doi.org/10.18632/oncotarget.28178).

Pokorny, R., **Stenehjem, D.D.** and Gilreath, J.A. (2022) "Impact of metformin on tyrosine kinase inhibitor response in chronic myeloid leukemia," *Journal of Oncology Pharmacy Practice*, p. 1-8. [doi:10.1177/10781552221077254](https://doi.org/10.1177/10781552221077254).

Chesnut, R., **Anderson, G.W.**, **Buncher, O.**, Dietrich, M.A., Rosenberg, J.M, Ross, L.J. (2022) "Prerequisite courses: Barriers to pharmacy admission or the keys to student success?", *American Journal of Pharmaceutical Education*, accepted for publication February, 2022. <https://doi.org/10.5688/ajpe8920>

Olson AW. Duluth medical respite house helping neighbors without homes. Reader view in the Duluth News Tribune. January 30, 2022.

Aremu TO, Ajibola OA, Oluwole OE, Adeyinka KO, Dada SO, **Okoro ON**. Looking beyond the malaria vaccine approval to acceptance and adoption in sub-Saharan Africa. *Frontiers in Tropical Diseases*.:22. doi: 10.3389/fitd.2022.857844

Presentations

Olson AW. The place of medical respite in the continuum of care for homelessness: The Bob Tavani House for Medical Respite. WDSE Almanac North (February 25, 2022)

Palombi, L. C., Program in Health Disparities Research Health Equity Series (Zoom), "The University's Role in Substance Use Disorder Leadership Post-COVID: Using Qualitative, Community-Based Input to Steer Our Efforts," University of Minnesota Medical School (February 8, 2022).

Palombi, L. C.,, Gurno, M., Bilden, B., Duluth Clean and Safe Naloxone Training, "Naloxone to Reverse Opioid Overdose," Duluth Greater Downtown Council, Duluth, Minnesota. (February 9, 2022).

Palombi, L. C., Gurno, M., Port and Bethel Treatment Facility Naloxone Training (Zoom), "Naloxone to Reverse Opioid Overdose," Port and Bethel SUD Treatment Facilities, Duluth. (February 7, 2022).

Grant Submissions

Integrating Behavioral Health Services and Medical Care at the Bob Tavani House for Medical Respite Care in the COVID-19 Era. **Olson AW (PI)** Centers for Disease Control Foundation and United Health Care: \$120,000 - **AWARDED**

A Community Integrated Referral Platform in a Rural Health System for Supporting Patients Seeking Support for Social Determinants of Health Needs. Kuenstler E, **Olson AW (Co-PI)**, Waring S, Harry M. Blue Cross Blue Shield of Minnesota and UCare: \$175,000 - **AWARDED**

Clinic-Randomized Trial of Clinical Decision Support for Opioid Use Disorder in Medical Settings. Rossom R et al, (**Olson AW EH Site Co-PI**). National Institute on Drug Abuse (NIDA). \$6.8 million - **AWARDED**

“Patch Clamp Electrophysiology Set-up” Klein AH (PI). Grant-in-Aid of Research, Artistry and Scholarship program. University of Minnesota. \$50,000

January 2022

Publications

Laura C. Palombi, Andrew Irish, Elizabeth A. Bowen, Lucas Kosobuski, Nathaniel Shin-Yun Chen, Amanda N. Hawthorne & Emily Becher (2022) ‘That's got me to where I am today’: examining the role of social capital in rural recovery, *Addiction Research & Theory*, DOI: 10.1080/16066359.2021.2021400

Brown JT, Gregornik DB, Jorgenson A, Watson D, Roiko SA, **Bishop JR.** Sertraline prescribing trends in children and adolescents based on CYP2C19 genotype. *Pharmacogenomics*; 2022 [Accepted].

Margraf D, Brown S, **Blue H**, Bezdicek, T, Wolfson J, Chapman, S. Comparison of 3-Factor versus 4-Factor Prothrombin Complex Concentrate for Emergent Warfarin Reversal: A Systematic Review and Meta-Analysis. *BMC Emergency Medicine*; 2022 [Accepted].

Presentations

Jacob Brown. Pharmacogenomics and Therapeutic Drug Monitoring in Psychiatry. ASCPT PGx Community 2022 Network and Community Experience. January 14, 2022.

Grant Submissions

Submitted:

Palombi, L (PI), Wirta Kosobuski, A (Co-PI), Hautala, D (Co-I). *A Partnership with the Grand Portage Band of Lake Superior Chippewa, Sawtooth Mountain Clinic, and Cook County Public Health in Opioid-Focused Prevention, Treatment, Recovery and Harm Reduction*. HRSA Rural Communities Opioid Response Program - Implementation. \$1,000,000.00. Submitted January 13, 2022. Project Dates: September 1, 2022- August 31, 2025.

Awarded:

Merredy (PI), **Stenehjem (Co-I)**. “Niclosamide or Pyrvinium and BAY-876 as a Combination for Triple Negative Breast Cancer Treatment.” Whiteside Institute for Clinical Research. Submitted Nov 5th, 2021. Total amount: \$15,000.

Courtney Paetznick (Pharmacy Resident Investigator), **Jacob Brown (Senior Investigator)**. Assessing the impact of integrating a pharmacogenomics-trained pharmacist into the care team serving pediatric patients with sickle cell disease. ASHP Foundation Resident Research Grant Program. Award: \$5,000; Children’s Minnesota.