

eScripts is a monthly newsletter highlighting faculty, staff, students and alumni of the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences.



OCTOBER 2022



Hispanic Heritage Month
Sept. 15-Oct. 15 is Hispanic Heritage Month, a time to celebrate and recognize the achievements and contributions of Hispanic American champions who have inspired others to achieve success. At CU Pharmacy, we are featuring #CUPharmacy #Pharmacy members who have made major contributions in their field and are proud to show their heritage. Click below to see our stand-outs each week.

[Read more](#)



Patel Receives Javits Award for her Body of Research on Neuroscience
Manisha Patel, PhD, received the Javits Award, given to outstanding investigators for major contributions in their field, for her ongoing work in neuroscience. Her current work builds upon over twenty years of research in her own lab to identify the oxidation-reduction and metabolic mechanisms of seizure-induced brain injury. The project aims to test a new hypothesis and could help to develop novel metabolism-based therapies for epilepsy.

[Read more](#)



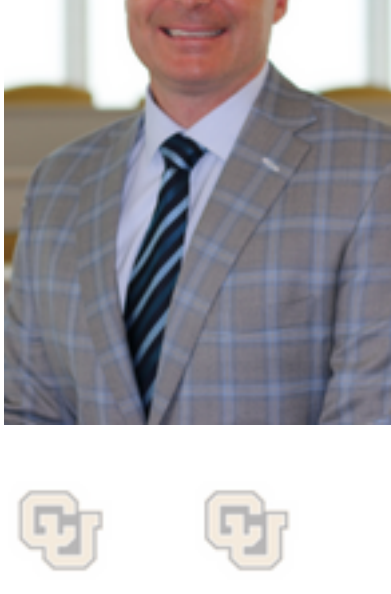
Research Shows Lipid Nanoparticles Have Significant Promise in Carrying Cancer Drugs to Tumors
Dmitri Simberg, PhD, associate professor for CU Pharmacy and co-director of the Colorado Center for Nanomedicine and Nanosafety, recently published significant research findings that show great promise using lipid nanoparticles to carry cancer drugs to tumors. This work was done in collaboration with Irina Balyasnikova, PhD, of Northwestern University.

[Read more](#)

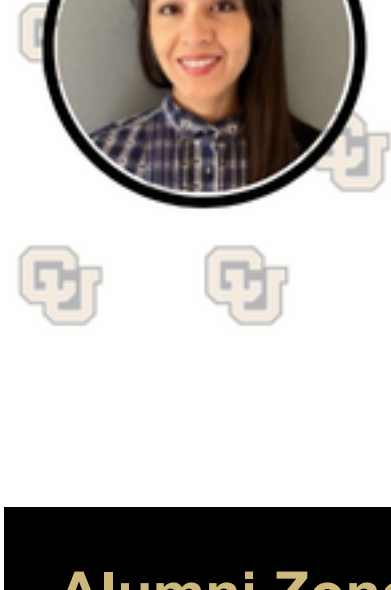


Huntsman's Latest Research Could Impact Autism Intervention
Molly Huntsman, PhD, published a new study suggesting that therapeutic interventions to treat neurodevelopmental disorders may be more effective if done during the early stages of brain development. The study, published in The Journal of Neuroscience, and covered in Science Daily, looks at Fragile X Syndrome (FXS), a pervasive neurodevelopmental disorder and a common cause of intellectual disability, autism and anxiety disorders.

[Read more](#)

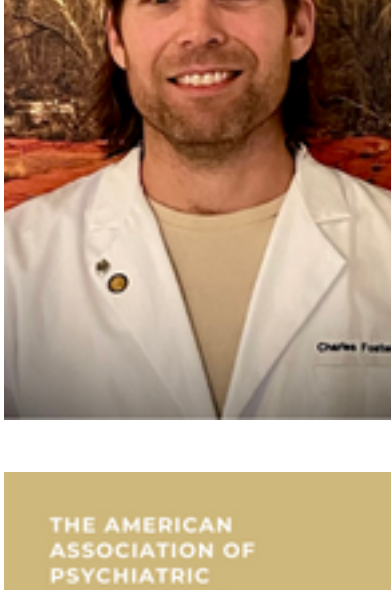


Kiser Honored by ACCP
Tyler Kiser, PharmD, was one of only four individuals in the nation named as a 2022 Outstanding Reviewer for the Pharmacotherapy journal by the American College of Clinical Pharmacy (ACCP). ACCP engage many peer reviewers who determine which high-quality articles will be published. These reviewers provide an integral service to the journals by critically evaluating the submitted manuscripts. The best reviewers provide the highest-quality reviews consistently and in a timely manner.



PhD Student Receives 2022 Gateway Award
PhD student Annagabriela Figueroa received the 2022 AFPE Underrepresented Minority Gateway to Research Award. Annagabriela worked with her mentor, Manisha Patel, PhD, on her research "Identifying redox and metabolic targets in an in vitro model of neural excitability." The study ultimately seeks to better examine the intersection of system failures with the understanding of the development of epilepsy.

Alumni Zone
Look here for the monthly alumni spotlights, upcoming events, and opportunities to get involved!



Alumni Spotlight: Dr. Charles Foster, PharmD, '10
2010 alumnus Charles Foster finds value in incorporating advanced technology to move forward the work of pharmacy. He's even gone as far as to create a website specifically designed for pharmacy professionals to network through an online community.

[Read more](#)



Warm Minds Think Clearly
The CU Pharmacy student chapter of the American Association of Psychiatric Pharmacists (AAPP) is selling Carhartt beanies as a fundraiser. The beanies will have the School of Pharmacy logo embroidered onto it! Order yours today and help support the students. Orders may be picked up on campus once the organization is notified of its arrival. Shipping is unavailable.

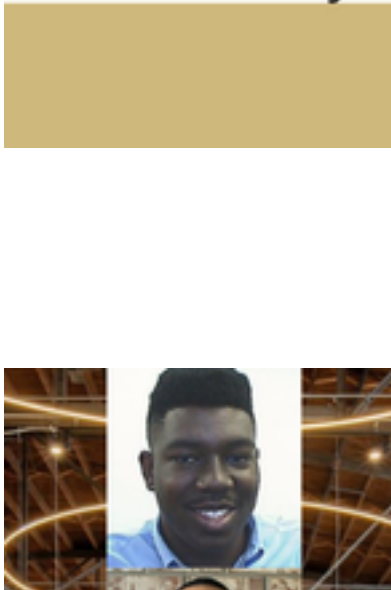
[Purchase a beanie](#)



Register for All Things Homecoming: Alumni Awards, Campus Tour, and CU Pharmacy Tailgate
Join us for the 2022 Homecoming Weekend, Oct. 27-29 as we honor and celebrate alumni during the annual Alumni Awards and the Homecoming Game/Tailgate at CU Boulder's Folsom Field. Connect and reunite with CU Pharmacy alumni, faculty, staff and students. Click the box below to register for CU Pharmacy's events!

"For discounted football game tickets, click here."

[Register for Pharmacy Events](#)



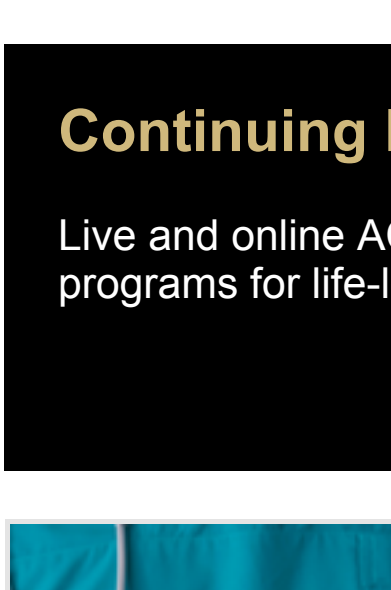
Student Organization Pilot Program
The Colorado Student Society of Health-System Pharmacists (CSSHP) is piloting a new program to identify alumni connections for participation in residency round tables, mentors for current students, advice on working in health systems, and other related activities. CSSHP are encouraged to participate. Please sign up to be contacted and have a great opportunity to reconnect with the current CSSHP chapter and catch up with what's happening at CU!

[Send them an email](#)



Alumni Forum Recap
The CU Pharmacy Alumni Association hosted its third Alumni Forum with an evening gathering at the RiNo Blue Moon Brewing Company, Sept. 14. The panel discussion on digital health was moderated by Dr. Katy Trinkley and featured alumni Paul Ehtizuel, PharmD '19, Przemek Lotf, PharmD '19, and Dean Marucci, PharmD '18.

[See the photos](#)



ICYMI: All Alumni Celebration
The CU Anschutz Alumni Central Office coordinated the first All Alumni Celebration for the campus Sept. 28 – Oct. 1 with an 80s band concert, a speakers' series, and a day at the Denver Zoo.

[Learn more from Alumni Central](#)

Continuing Education
Live and online ACPE-accredited programs for life-long learning.



Advanced Diabetes Certificate Program: Use of Pattern Management in Tele-Practice Starts Oct. 7
The focus of this program is on pattern management for complex diabetes patients, and is designed to prepare pharmacists with the knowledge, skills, and practical training to use pattern management and technology to provide patient centered diabetes care. The program provides comprehensive didactic instruction on key concepts for managing complex diabetes patients using current standards of practice and technology as well as practical training where pharmacists apply concepts in actual pharmacy practice settings.

[Learn more and register](#)

Thought Leaders
Monthly overview of faculty in the news and their published research.

In The News

- **Society for Healthcare Epidemiology of America, Antimicrobial Stewardship Potpourri**, feat. Meghan Jeffers, PharmD
- **Pharmacy Times, Coping With Burnout and Stress in Community Pharmacies**, feat. Wes Nuffer, PharmD
- **Health, Cooking Chicken in NYQuil Is a 'Recipe for Danger' FDA Warns, Citing 'Talk Video'**, feat. Gina Moore, PharmD
- **Medscape Medical News, Time to Test Effects of CBD in Cardiovascular Disease?**, feat. Robert Page, PharmD

Research Roundup

- **Acta Biomater.** Myocardial matrix hydrogel acts as a reactive oxygen species scavenger and supports a proliferative microenvironment for cardiomyocytes. Wang HM, Meslin JM, Hunter J, Cattaneo P, Guimaraes-Carvalho N, Braden RL, Luo C, Hui RC, Dacicsovska M, Harsani KC, Evans S, Christman KL. 2022 Aug 27;S1742-7061(22)00526-8. doi: 10.1016/j.actbio.2022.08.050. Online ahead of print. PMID: 36041648
- **Alcohol.** Profiling the Oxylipidome in Aged Mice after Chronic Ethanol Feeding: Identifying Lipid Metabolites as Drivers of Hepatocyte Stress. Anton P, Rutt LN, Capper C, Orlicky DJ, McCullough R. 2022 Sep 20;S0741-8329(22)00096-9. doi: 10.1016/j.jhevol.2022.08.012. Online ahead of print. PMID: 36102175
- **Am J Health Syst Pharm.** Relationship between advanced pharmacy practice experiences grading schemes and pharmacy residency match rates. Sharybenko J, Skrabal M, Kormanik T, Oswald CL, Prisco J, Jarrett JB, Clarke C, Ruehrer V, Gilliam E, Clauson A, Shan G. 2022 Sep 9;24(25):24. doi: 10.1093/ajhp/ibx2454. Online ahead of print. PMID: 36082956
- **Br J Clin Pharmacol.** Long-acting injectable Cabotegravir: How drug concentrations could help guide patient management. Castillo-Mancilla JR, Anderson PL. 2022 Oct;38(10):4384-4386. doi: 10.1111/bcp.15410. Epub 2022 Aug 16. PMID: 35971819 No abstract available.
- **Cancers (Basel).** Stage-Specific Effect of Intracell Hexacosphate on Cancer Stem Cell Pool during Growth and Progression of Prostate Tumorigenesis in TRAMP Model. Riana K, Karshchi K, Jain AK, Ravichandran K, Maroni P, Agarwal R. 2022 Aug 30;14(17):4204. doi: 10.3390/cancers14174204. PMID: 36077751
- **Clin Toxicol (Phila).** Genetic variants associated with ALT elevation from therapeutic acetaminophen. Monte AA, Ariaga Mackenzie I, Pattee J, Kaiser S, Williams E, Ruckack B, Reynolds KM, Dart RC, Heard KJ. 2022 Sep 14-17. doi: 10.1080/15563650.2022.2117053. Online ahead of print. PMID: 36105611
- **Clin Transl Sci.** The ATTEM Study: Advances in Technology to Enhance DHEP Adherence Monitoring (ATEAM) Among Young Men Who Have Sex with Men (YMSM). Brumfiel M, Hosok S, Keckler K, Anderson PL, Xiong D, Liu H, Huhn G. 2022 Sep 15. doi: 10.1111/ctls.13414. Online ahead of print. PMID: 36106611
- **Diabetes.** Catepsin D Drives the Formation of Hybrid Insulin Peptides Relevant to the Pathogenesis of Type 1 Diabetes. Crawford SA, Wiles TA, Wenzlau JM, Powell RL, Barbour G, Dang M, Groeger J, Barra JM, Burnette KS, Hohenstein AC, Baker RL, Tee HM, Haskins K, DeKong T. 2022 Aug 30;dbz203003. doi: 10.2337/dbz203003. Online ahead of print. PMID: 36041198
- **Drug Metab Dispos.** Physiologically Based Pharmacokinetic Modeling of Vitamin D₃ and Metabolites in Vitamin D-Insufficient Patients. Sawyer G, Tvey SM, West RE 3rd, Nolin TD, Joy MS. 2022 Sep 5(9):1161-1169. doi: 10.1124/dmd.121.009609. Epub 2022 Jul 2. PMID: 35779863
- **Front Cell Dev Biol.** Crosstalk between neuroinflammation and oxidative stress in epilepsy. Fabiak T, Patel M. 2022 Aug 10;10:978933. doi: 10.3389/fcell.2022.978933. eCollection 2022. PMID: 36035987 Free PMC article. Review.
- **Front Immunol.** A Novel Tolerogenic Antibody Targeting Disulfide-Modified Autoantigen Effectively Prevents Type 1 Diabetes in NOD Mice. Li W, Zhang Y, Ren L, Dai S. 2022 Aug 11;13:877022. doi: 10.3389/fimmu.2022.877022. eCollection 2022. PMID: 36032077 Free PMC article.
- **Front Immunol.** Insulin B-chain hybrid peptides are agonists for T cells reactive to insulin B9-23 in autoimmune diabetes. Wenzlau JM, DiLiso JE, Barbour G, Dang M, Hohenstein AC, Nakayama M, DeLong T, Baker RL, Haskins K. 2022 Aug 10;13:998650. doi: 10.3389/fimmu.2022.998650. eCollection 2022. PMID: 36020919 Free PMC article.
- **Front Pain Res (Lausanne).** Editorial: Rethinking the treatment of acute and chronic pain: the relationship of mechanism and exposure to therapeutic outcome. Dahan A, Harenhorn TK. 2022 Aug 23;9:91569. doi: 10.3389/fpain.2022.991569. eCollection 2022.
- **Int J Mol Sci.** AST-487 Inhibits RET Kinase Driven TERT Expression in Bladder Cancer. Agarwal N, Zhou Q, Arya D, Rinaldetti S, Dux E, LaBarbera DV, Theodoreescu D. 2022 Sep 16;23(18):10819. doi: 10.3390/ijms231810819. PMID: 36142729 Free PMC article.
- **Int J Mol Sci.** High-Content Drug Discovery Targeting Molecular Biotarget Cancer Subtypes. Rinaldetti S, Zhou Q, Abbott JM, de Jong FO, Esquer H, Costello JC, Theodoreescu D, LaBarbera DV. 2022 Sep 14;23(18):10695. doi: 10.3390/ijms231810695. PMID: 36142576 Free PMC article.
- **Int J Mol Sci.** New Insights into Ion Channels: Predicting hERG-Drug Interactions. Wempe MF. 2022 Jul 14;23(18):10732. doi: 10.3390/ijms231810732. PMID: 36142644 Free PMC article.
- **JAMA Ophthalmol.** Association Between Open Payments-Reported Industry Transfers of Value and Prostaglandin Analog Prescribing in the US. Nguyen AM, Anderson KE, Anderson G, Johnson TV. 2022 Sep 1;140(9):955-962. doi: 10.1001/jamaophth.2022.2757. PMID: 35907016 Free PMC article.
- **J Control Release.** Indocarbocyanine nanoparticles extravasate and diffuse better than liposomes in brain tumors. Balyasnikova IV, Zannikou M, Wang G, Li Y, Duffly JT, Levine RN, Seblani M, Galkwad H, Simberg D. 2022 Sep;349:413-424. doi: 10.1016/j.jconrel.2022.07.008. Epub 2022 Jul 14. PMID: 35817279
- **J Control Release.** Nanometer- and angstrom-scale characteristics that modulate the effectiveness to nanonanoparticles. Moghimi SM, Haroon HB, Yachar A, Simberg D, Tropealess PN. 2022 Sep 21;501(8):3659-3705. doi: 10.1016/j.jconrel.2022.09.039. Online ahead of print. PMID: 36152807
- **J Manag Care Spec Pharm.** Stakeholder perception of pharmaceutical value: A multicenter decision analysis pilot case study for value assessment in the United States. Mendola ND, Oehrlein E, Perletto EM, Westrich K, McQueen RB. 2022 Oct;28(10):1190-1196. doi: 10.18553/jncp.2022.28.10.1190. PMID: 36125060
- **J Mol Biol.** Characterization of a Prionoidal Major Capsid-Scavenging Protein Complex in Icosahedral Virus Shell Assembly. Davis CH, Backes D, Moras MC, Churchill MEA, Catalano CE. 2022 Oct 15;434(16):167719. doi: 10.1016/j.jmb.2022.167719. Epub 2022 Jul 9. PMID: 35820453
- **J Pharm Pract.** Pragmatic Use of Catheter-Directed Thrombolysis in Pulmonary Embolism and a Comparative Evaluation With Traditional Therapies in Submassive Venous Thromboembolism. Bradley M, Bull T, Hountras P, MacLaren R. 2022 Oct;35(5):738-746. doi: 10.1177/08971900211004833. Epub 2021 Apr 7. PMID: 33823705
- **JPEN J Parenter Enteral Nutr.** Optimizing the nutrition support care model: Analysis of survey data. Mumford MS, Madhanchi B, Mohamed Elhadji O, Patel JJ, Barnes DL, Blackmer AB, Christian JJ, Hennessy SA, Hurt RT, Jain A, Kapur MB, Katz J, Labossiere R, Limkatani BN, McCarthy PJ, Morrison CA, Newberry C, Pimiento JM, Rosenthal MD, Taylor B, McClave SA, ASPEN Physician Engagement Committee. 2022 Sep;46(7):1709-1724. doi: 10.1002/jpen.2326. Epub 2022 Feb 16. PMID: 35040154 PMID: 36081983 Free PMC article. No abstract available.
- **Microbiol Spectr.** Cefadroxil Comparable to Ceftriaxone in Minimum Inhibitory Concentrations among Methicillin-Susceptible Staphylococcus aureus Isolates from Pediatric Musculoskeletal Infections. Haynes AS, Pritz A, Silveira LJ, Parker SK, Lampe JN, Kadavanan JS, Horswell AR, Fish D. 2022 Aug 31;10(4):e0093922. doi: 10.1128/spectrum.011039-22. Epub 2022 Jun 22. PMID: 35730963 Free PMC article.
- **Mol Carcinog.** Gender-based effect of absence of gut microbiota on the protective efficacy of Bifidobacterium longum-fermented rice bran diet against inflammation-associated colon tumorigenesis. Kumar R, Maurya A, Kariker KD, Kart R, Ibrahim H, Kabir MI, Kumar D, Weber AM, Agarwal R, Khatkhat R, Ryan EP, Raina K. 2022 Oct;61(10):941-957. doi: 10.1002/mc.24352. Epub 2022 Jul 20. PMID: 35856887
- **Nutrients.** The Effect of Dietary Carbohydrate and Fat Manipulation on the Metabolome and Markers of Glucose and Insulin Metabolism: A Randomized Parallel Trial. McCullough D, Harrison T, Boddy LM, Enright KJ, Amirabdohlahian F, Schmidt MA, Doenges K, Quinn K, Reisdorf N, Mazidi M, Lane KE, Stewart CE, Davies IG. 2022 Sep 7;14(18):3691. doi: 10.3390/nu14183691. PMID: 36145067 Free PMC article.
- **Pediatr Crit Care Med.** Decreases in Nephrotoxic Pain Medications Are Not Associated With Increased Opioid Utilization in Critically Ill Children. Stenson EK, DeMaselle G, Shah A, Reiter PD, Brinton J, Martin S, Iwanowski M, Rennie M, Soranno DE, Glat RM. 2022 Sep 2. doi: 10.1097/CCO.00000000000003972. Online ahead of print. PMID: 36066847
- **Pharmacotherapy.** Cumulative benzofuran-dibenzofuran exposures in persons with HIV taking single- vs. multiple-tablet regimens. Coyle RP, Morrow M, MaWhinney S, Coleman SS, Zhang JH, Ellison L, Bushman LR, Kiser JJ, Anderson PL, Castillo-Mancilla JR. 2022 Aug;42(8):641-650. doi: 10.1002/phar.2711. Epub 2022 Jun 24. PMID: 3570797