Boettcher Foundation names six CU researchers to 2023 class of Boettcher Investigators[1]

Six outstanding biomedical researchers at the University of Colorado are members of the Boettcher Foundation's 2023 class of Boettcher Investigators, recipients of grant funding through the Boettcher Foundation's Webb-Waring Biomedical Research Awards Program.

The 13-year-old program invests in leading Colorado researchers during the early stages of their careers, providing support to fund their independent scientific research.

Each researcher receives $235,000 in grant funding to support up to three years of biomedical research, supporting Boettcher Foundation's goal to retain top scientific talent in Colorado.

CU's new Boettcher Investigators and their research topics are:

University of Colorado Anschutz Medical Campus

Neel Butala, M.D., M.B.A., Assistant Professor, Medicine-Cardiology. "Evaluating the use of the electronic health record to extend the REGROUP Trial." Butala's project will use cutting-edge, natural-language processing techniques to validate the use of real-world, electronic health records data for the conduct of clinical trials. It will then use those findings to extend the utility and value of data collected during existing clinical trials.

Caroline M. Dias, M.D., Ph.D., Assistant Professor, Department of Pediatrics. "Characterizing genetic and cellular heterogeneity in Fragile X-associated tremor/ataxia syndrome." Dias' research will characterize the mechanisms and consequences of dysregulation of the FMR1 gene, with specific focus on its role in the adult neurodegenerative disorder, Fragile X-associated tremor/ataxia syndrome, and on how sex-chromosome dynamics affect its severity in the female brain.

Matthew Witkowski, Ph.D., Assistant Professor, Pediatrics. "Targeting TP53-mutant acute leukemia to overcome chimeric antigen receptor (CAR) T-cell therapy resistance." Witkowski's research will investigate the role of mutations in the p53 protein in the ability of acute leukemias to resist treatment with Chimeric Antigen Receptor (CAR-T) cell therapy and identify new genetic vulnerabilities that may aid in overcoming treatment resistance.

University of Colorado Boulder

Halil Aydin, Ph.D., Assistant Professor, Biochemistry. "Cellular and molecular mechanisms of mitochondrial form and function in human health and disease." Aydin's research will focus on dissecting, at a molecular level, the structure-function relationships of the protein machinery involved in mitochondrial dynamics, and how dysfunction of this machinery contributes to mitochondrial diseases.

Nick Bottenus, Ph.D., Assistant Professor, Biomedical, Mechanics of Materials, Robotics and Systems Design. "Binding kinetics of targeted microbubble agents." The overall goal of Bottenus' project is to advance the field of ultrasound molecular imaging by studying how targeted microbubble contrast agents bind to receptor targets on vessel walls, and to develop novel, ultrafast, "two-color" ultrasound molecular imaging techniques.

Nuris Figueroa-Morales, Ph.D., Assistant Professor, Physics. "Mechanics of mucus organization and transport." The focus of Figueroa-Morales' research is on understanding how the microscopic and mechanical properties of respiratory mucus factor into clearance and susceptibility to bacterial colonization, with the goal of generating data to develop novel treatments for lung disease.

“The university is so proud of the CU Anschutz and CU Boulder faculty selected for this year’s class of Boettcher Investigators and incredibly grateful to the Boettcher Foundation for providing this vital funding to some of our most promising researchers,” said CU President Todd Saliman. “In addition to supporting these dynamic scientists at pivotal points in their careers, the Boettcher Investigators program advances biomedical research and discovery with the potential to have far-reaching and profound implications.”

Announced May 25, the eight-member class of Boettcher Investigators also includes researchers from Colorado State University and National Jewish Health. Read more here.[2]

“We are thrilled to support our 2023 Boettcher Investigators, and as proud investors in their work, we are confident that these exceptional researchers will continue to push the boundaries of discovery and medical breakthrough,” said Katie Kramer, president and CEO of the Boettcher Foundation. “Their innovative research holds the promise of transformational impact that will drive progress in health care and make a meaningful difference in the lives of Coloradans.”

This year’s total $1.88 million in biomedical research grants awarded allows researchers to advance their independent research and compete for significant federal and private awards.

“Colorado BioScience Association applauds Boettcher Foundation’s support of Colorado’s most dynamic and promising researchers,” said Elyse Blazevich, president and CEO of the Colorado BioScience Association. “The Webb-Waring Biomedical Awards program invests in Colorado researchers at a pivotal time in their careers and encourages them to deepen their roots in Colorado as they contribute to the leading-edge health innovations coming from our state.”

Since its inception in 2010, the Webb-Waring Biomedical Research Awards program has advanced the work of 98 Boettcher Investigators, with more than $20 million in grant funds, including the 2023 class. The researchers have attracted more than $150 million in additional independent research funding from federal, state and private sources.

This year’s class brings the total number of CU-selected Boettcher Investigators[3] to 65, representing research awards of over $15.1 million.

For more information about the Webb-Waring Biomedical Research Awards, visit the Boettcher Foundation website[4].

CU data center move set for Oct. 6-9 [5]

Jennifer Sobanet announced as interim chancellor at UCCS [6]

Advancing research collaboration: AB Nexus awardees announced [7]

Tuition, fees covered for Southern Ute students under partnership with tribe [8]

Satellites reveal widespread decline in global lake water storage [9]

Olympic and Paralympic sculpture dedication [10]

CU Denver | Anschutz Medical Campus becomes first Asian American and Native American Pacific Islander-Serving Institution in Rocky Mountain region [11]

CU Denver's Smart Futures Lab promises to be an innovation hub in downtown Denver [12]

CU Anschutz receives $50 million from the Anschutz Foundation to accelerate breakthroughs in medicine [13]

Cathy J. Bradley, Ph.D., named as Colorado School of Public Health's next dean [14]

Aicher named College of Business Dean [15]

Freitas welcomed by CU Pharmacy as inaugural Assistant Dean for Equity, Diversity and Inclusion [16]

Schaub earns CU Boulder's highest award for teaching and research[17]

CU Boulder ranked fifth in universities for Peace Corps volunteers[18]

University of Colorado begins 1st psilocybin study[19]

UCCS research project looks to Catholic nuns for how to live fully to the end[20]

Links
[1] https://connections.cu.edu/spotlights/boettcher-foundation-names-six-cu-researchers-2023-class-boettcher-investigators[2] https://boettcherfoundation.org/2023-boettcher-investigators/[3] https://www.cu.edu/bfww/cu-investigators[4] http://boettcherfoundation.org/webb-waring-biomedical-research/[5] https://connections.cu.edu/stories/cu-data-center-move-set-oct-6-9[6] https://connections.cu.edu/stories/jennifer-sobanet-announced-interim-chancellor-uccs[7] https://connections.cu.edu/stories/advancing-research-collaboration-ab-nexus-awardees-announced[8] https://connections.cu.edu/stories/tuition-fees-covered-southern-ute-students-under-partnership-tribe[9] https://connections.cu.edu/stories/satellites-reveal-widespread-decline-global-lake-water-storage[10] https://connections.cu.edu/stories/olympic-and-paralympic-sculpture-dedication[11] https://connections.cu.edu/stories/cu-denver-anschutz-medical-campus-becomes-first-asian-american-and-native-american-pacific[12] https://connections.cu.edu/stories/cu-denver-s-smart-futures-lab-promises-be-innovation-hub-downtown-denver[13] https://connections.cu.edu/stories/cu-anschutz-receives-50-million-anschutz-foundation-accelerate-breakthroughs-medicine[14] https://connections.cu.edu/stories/cathy-j-bradley-phd-named-colorado-school-public-health-s-next-dean[15] https://connections.cu.edu/people/aicher-named-college-business-dean[16] https://connections.cu.edu/people/freitas-welcomed-cu-pharmacy-inaugural-assistant-dean-equity-diversity-and-inclusion[17] https://connections.cu.edu/people/schaub-earns-cu-boulder-s-highest-award-teaching-and-research[18] https://connections.cu.edu/itn/cu-boulder-ranked-fifth-universities-peace-corps-volunteers[19] https://connections.cu.edu/itn/university-colorado-begins-1st-psilocybin-study[20] https://connections.cu.edu/itn/uccs-research-project-looks-catholic-nuns-how-live-fully-end