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FOR IMMEDIATE RELEASE

ACD AWARDS FELLOWSHIP GRANTS TO ADVANCE CREATINE DEFICIENCY RESEARCH AT SIX RESEARCH CENTERS

Carlsbad, CA (March 31, 2026) — The Association for Creatine Deficiencies (ACD) is pleased to announce support of six new research projects. Six 2026 ACD Fellowship Grantees will spend a year conducting research to advance treatment options for Cerebral Creatine Deficiency Syndromes (CCDS).

The researchers whose projects were selected include:

- **ACD 1st-Year Fellow, Dr. Sara Biagiotti, University of Urbino**
  According to Dr. Biagiotti, "My team and I will administer RBCEVs carrying IVTGAMT mRNA to GAMT-deficient mice once a week for 12 weeks, monitoring GAA levels in blood throughout the study, and in muscle and brain at its conclusion. This work is important because it explores a potentially safe and effective therapeutic approach that could offer a promising new treatment option for patients living with GAMT."
- **ACD 1st-Year Fellow, Katherine Matthew, University of Toronto** (*In the lab of Dr. Andreas Schulze*)
  "We will use nuclear magnetic resonance spectroscopy and CRISPR knockout screen to investigate how intracellular creatine levels are regulated," stated Matthew. "We will also identify the intracellular localization of AGAT using subcellular fractionation and electron microscopy. This will help to develop novel drugs for CCDS patients by improving our understanding of what is involved in creatine regulation."
- **ACD 2nd-Year Fellow, Dr. Chin-Yi Chen, Virginia Tech, Fralin Biomedical Research Institute** (*In the lab of Dr. Cheng-Chia Wu*)
  Regarding her research, Dr. Chen said, "This project develops a noninvasive focused ultrasound (FUS) method to temporarily open the blood-brain barrier and improve creatine delivery to the brain in Creatine Transporter Deficiency (CTD). The

MRI and magnetic resonance spectroscopy (MRS) data has shown that the non-invasive FUS-BBBO approach safely increases brain creatine levels in CTD mouse model. The animal behavior tests will reveal whether creatine delivery via FUS-BBBO could improve cognitive function in CTD mouse model. This research is crucial because CTD currently has no effective treatment, and enhancing brain creatine delivery could directly target the underlying brain deficiency of the disease and improve cognitive outcomes for patients."

- **ACD 2nd-Year Fellow, Alex Edwin, Stanford University, Department of Pathology** (*In the lab of Dr. Thomas Montine*)
  "We are investigating novel creatine delivery strategies to treat Creatine Transporter Deficiency. We believe these approaches could represent a new direction for therapeutic development in CTD," stated Edwin.
- **ACD 2nd-Year Fellow, Tesla Peretti, Queen's University** (*In the lab of Dr. Jagdeep Walia*)
  "I will be investigating the best dosage and route of administration for an AAV9 based gene therapy to treat AGAT deficiency," said Peretti. "It is essential to identify the optimal method and dosage for administering this gene therapy, as this is a critical step in advancing the treatment to clinical trials. We believe that this has the potential to be a curative therapy for AGAT deficiency."
- **ACD 2nd-Year Fellow, Israel Abebe Admasu, Boston Children's Hospital; Harvard Medical School**
  "We are using functional near-infrared spectroscopy (fNIRS) to measure real-time cortical brain activity in individuals with creatine deficiency disorders and compare it to typically developing controls" stated Admasu. "Now in the second year of funding, the majority of first time participant recordings have been completed. Our current focus is on comprehensive data analysis, conducting test–retest assessments to evaluate reliability, and refining the biomarker using advanced computational and machine learning approaches to improve sensitivity and specificity."

"The fellowship program has proven to elevate our understanding of CCDS and to steer early career scientists towards staying in this field for the long-term. This year's grants are some of the most diverse yet with research in CTD, GAMT, and AGAT with translational focus, biomarker advancement, metabolic functional studies, and more ," said ACD Executive

Director Heidi Wallis. “We are honored to support these talented researchers and welcome them into our community where the impact of their work has the potential to be enormous.”

The ACD Fellowship program funds high-potential research aimed at advancing CCDS treatment options. Many previous fellowship recipients have continued in CCDS research, expanding their work and securing additional funding to further develop their findings. Applications for the 2027 ACD Fellowship Grants will open in fall 2026. For more information about ACD’s research funding opportunities, visit creatineinfo.org.

About ACD: The Association for Creatine Deficiencies’ mission is to eliminate the challenges of CCDS. ACD is committed to providing patient, family, and public education to advocate for early intervention through newborn screening, and to promote and fund medical research for treatments and cures for Cerebral Creatine Deficiency Syndromes. Because CCDS mimic symptoms of other medical conditions, patients are often first diagnosed with autism, cerebral palsy, epilepsy, and other disorders. Proper diagnosis and early intervention are critical to establishing interventions needed to improve life quality and longevity for the CCDS patient. For more information regarding ACD, please visit creatineinfo.org.

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