INTRODUCTION (Dr. Gregory C. Hutchings, Jr.):

- This year, we excited to recognize an outstanding student scientist and senior at T.C. Williams High School, Ms. Ana Humphrey.
- If you have not heard, Ana is the top award winner of the 2019 Regeneron Science Talent Search, the nation's oldest and most prestigious science and math competition for high school seniors. This recognition comes with a cash prize of \$250,000.
- Over the past three years, Ana has been working on her award winning research with several mentors as part of the Science Research course that we offer at T.C. Williams, which is taught by Ms. Shawn Lowe.
- To present our award winner, I am pleased to introduce our Instructional Specialist for Science, Ms. Jennifer Lay.

REMARKS AND RECOGNITIONS (Ms. Jennifer Lay):

Scientific research can take many forms. It can be used to increase our understanding of the universe and it can also be used to solve local community programs. This evening, I am so excited to recognize Ana Humphrey. It has been amazing to see her grow over the last seven years. I know that you will be as impressed as I am when you hear about Ana's research and all of the ways she has been recognized for that research.

Previous Recognitions and Awards

- 2014 Discovery 3M Young Scientists Challenge National Finalist
- 2014 Caring for Our Watersheds, Watershed Warriors, 2nd Place Winner
- 2016 Virginia Junior Academy of Science Symposium, 1st Place Mathematics, Statistics and Computer Science
- 2016 Northern Virginia Regional Science Fair, 1st Place Computer Science, Grade Prize Alternate Awardee
- 2016 Winner of the Frances and Sydney Lewis Environmental Science Scholarship from the Virginia Environmental Endowment
- 2016 US Stockholm Junior Water Prize, Virginia State Winner and National Finalist
- 2017 Northern Virginia Regional Science Fair, 1st Place Physics and Astronomy, Grand Prize Winner
- 2017 National Junior Science and Humanities Symposium, 1st Place Oral Presentations Mathematics and Computer Sciences
- 2017 US Stockholm Junior Water Prize, Virginia State Winner and Grand Prize runner-up
- 2017 Virginia State Science and Engineering Fair, 2nd Place Physics and Astronomy Winner
- 2017 Environmental Education 30 under 30 2017 Gloria Barron Prize for Young Heroes
- 2018 National Junior Science and Humanities Symposium, 1st Place Poster Presentations Physics and Astronomy
- 2018 Northern Virginia Regional Science Fair, 1st Place Physics and Astronomy,
- 2018 Virginia State Science and Engineering Fair, 3rd Grand Prize Winner, 1st Place Physics and Astronomy
- 2018 International Science and Engineering Fair, Best of Category Winner Physics and Astronomy
- 2018 National Center for Women & Information Technology Aspirations in Computing Award Winner
- 2018 Virginia's Outstanding STEM Governor's Award

The Regeneron Science Talent Search

- The Regeneron Science Talent Search is an annual program of the Society for Science and the Public. It is one of the nation's most prestigious science research competitions for high school seniors. Its purpose is to provide a national stage for the country's best and brightest young scientists to present original research to nationally recognized professional scientists. In this competition, there are three levels. Over 1,800 students submitted their research and the top 300 seniors in the country are recognized. This year, two students from T.C. Williams, Tessa Naughton-Rockwell and Ana Humphrey, were recognized for this honor. This past March, Ana was then selected as one of 40 finalists who participated in a week of final judging in Washington, D.C. At the end of that week, Ana was chosen as the first place winner, which comes with a prize of \$250,000.
- Ana was recognized for her mathematical model to determine the possible locations of exoplanets, which are planets outside our solar system that may have been missed by NASA's Kepler Space Telescope. Hypotheses in the field say that planetary formation creates dynamically packed systems, so Ana used her model to find "unpacked" spaces where as many as 560 new planets might fit and identified 96 locations as primary search targets. Her research could aid our understanding of the formation of planets and inform our search for life in outer space.

Ana, if you would please come join me up front, and if everyone else would please join me in a round of applause for Ana Humphrey.

CONCLUDING REMARKS (Dr. Gregory C. Hutchings, Jr.):

- We are so proud of what Ana has accomplished and are looking forward to hearing more about her in the future.
- Congratulations to Ana, her family, and all the ACPS teachers and school leaders who have supported her on this outstanding journey.