Tracking Protein’s Journey for Clues to Fighting Cancer

Molecular scientist Nikolas Nikolaidis and his students have discovered how a certain protein travels within stressed and cancerous cells — a finding that could lead to new cancer therapeutics.

The protein travels from inside the cell to the cell surface and is present in cells that are exposed to fevers, toxins or pathophysiological conditions like cancer. It also is present in the surface of 80 percent of tumors, Nikolaidis explained.

The research focuses on defining how and why this protein, which functions to keep the cell alive, travels to the surface of such cells. The goal is the development of drugs that alter the location of the protein and activate the immune system to attack the cancer.

NEW RESEARCH MAY HOLD CLUES TO DEFEATING ANTIBIOTIC-RESISTANT ‘SUPERBUGS’

With antibiotic resistance a global public health threat, campus researchers have found a possible solution. Their latest published research results show that the use of zinc-containing compounds, along with existing antibiotics, is a novel strategy to overcome “superbug” infections.

The work continues the 2014 pioneer discovery by CSUF scientist Marcelo E. Tolmasky and his students that, for the first time, demonstrated zinc ions bound to chemicals — called ionophores — overcome resistance to a widely used group of antibiotics tapped to treat bacterial infections.

Tolmasky, fellow faculty researchers María Soledad Ramírez and Veronica Jimenez, and their students studied options to counter bacterial resistance assessing several zinc ionophore compounds. When administered in combination with the antibiotics, the compounds restore the antibiotics’ ability to kill otherwise resistant infectious bacteria.

Titans Win Three Big West Championships

Cal State Fullerton came in a close second in the final 2018-19 Commissioner’s Cup standings, with three Big West championship titles in men’s golf, softball and women’s track and field. Last year, Titans won the cup as five teams reached the NCAA tournaments.

Consistency was a hallmark of Titan Athletics throughout the year — the program also recorded top three finishes in men’s cross country, women’s cross country and men’s basketball.
Campus Celebrates 50 Years of Preserving Oral History

To celebrate its 50th anniversary, the Lawrence de Graaf Center for Oral and Public History (COPH) hosted an afternoon of speakers and panelists of center founders and directors, students, alumni and campus history faculty, along with oral history narrators whose stories were recorded by COPH.

“The Center for Oral and Public History is one of the highest steeples of excellence on campus,” President Fram Virjee said to the audience at an evening reception. “We treasure stories. They create community. Through the center, thousands of people have had their stories preserved for future generations.”

Center Director Natalie Fousekis took time to thank founders Lawrence de Graaf, Art Hansen and Gary Shumway.

Established as the Oral History Program, the Lawrence de Graaf Center for Oral and Public History maintains the largest regionally focused oral history archive in California, with 6,000 recorded interviews, related transcripts, photographs and other materials.

Did You Know?

Cal State Fullerton has committed to operating as a sustainable campus in operations, outlook and curriculum, and recently was named a STARS (Sustainability Tracking, Assessment & Rating System) Silver Institution based on its accomplishments.