



# USAMRDC Good News Story



## U.S. Army Medical Research and Development Command

### *2019 Nobel Prize Winners Have Army Funding Ties*

- Two American scientists awarded the Nobel Peace Prize this week have previously received funding from the U.S. Army Medical Research and Development Command's (USAMRDC) Congressionally Directed Medical Research Programs (CDMRP).
- Gregg Semenza and William Kaelin –along with London-based scientist Peter Radcliffe– were jointly awarded the Nobel Prize in Physiology or Medicine in Sweden on October 7.
- All three scientists received the award for their work in establishing the genetic mechanisms allowing cells to respond to changes in oxygen levels; findings which may have implications for treating diseases like cancer, anemia, heart attacks, and strokes.
- Semenza, a professor at Johns Hopkins University, previously received an FY11 Breast Cancer Research Program (BCRP) Impact Award (BC112950) to examine whether inhibiting hypoxia inducible factor (HIF)-1 and metabolic enzymes make breast cancer cells more sensitive to chemotherapy.
- Kaelin, a professor of medicine at Dana-Farber Cancer Institute and Brigham & Women's Hospital Harvard Medical School, received an FY03 Tuberous Sclerosis Complex Research Program (TSCR) Idea Award (TS030008) to examine the mechanisms by which the tumor suppressor gene TSC2 regulates HIF-1.
- Semenza and Kaelin are the third and fourth Nobel Prize laureates to receive funding from the USAMRDC: Mr. Roger Tsien (2008, Chemistry) and Ms. Elizabeth Blackburn (2009, Physiology or Medicine) were previous awardees.



Clockwise from Top: Nobel Prize ceremony in Stockholm, Sweden (courtesy The New York Times); William Kaelin following award announcement (courtesy Dana-Faber Cancer Institute); Gregg Semenza (courtesy Johns Hopkins University)

**OUTCOME:** By continuing to fund leading-edge research across a number of various subject areas, USAMRDC continues to secure the immediate health and future readiness of the Warfighter.