## **HOUSE JOINT RESOLUTION NO. 564**

Commending Eric Betzig, Ph.D.

Agreed to by the House of Delegates, January 23, 2015 Agreed to by the Senate, February 19, 2015

WHEREAS, Eric Betzig, Ph.D., a renowned physicist, inventor, and engineer at the Howard Hughes Medical Institute's Janelia Farm Research Campus in Loudoun County, received the 2014 Nobel Prize in chemistry for his contributions to super-resolved fluorescence microscopy; and

WHEREAS, the Nobel Prize, named for the Swedish industrialist and founder Alfred Nobel, is an international award presented each year by the Royal Swedish Academy of Sciences for outstanding

achievements in chemistry, physics, medicine, literature, and peace; and

WHEREAS, experiencing a breakthrough while working privately in 2003, Dr. Betzig came to the Janelia Farm Research Campus to continue his scientific career after working for several years in his father's machine parts factory in Michigan; he had previously studied microscopy at Cornell University and Bell Labs; and

WHEREAS, Dr. Betzig determined that the green fluorescent protein in jellyfish could be used to enhance microscopes by creating cells that glow and developed a concept for a high-resolution microscope using the protein with biophysicist Harald Hess; and

WHEREAS, using the customer service skills learned while working at Ann Arbor Machine Company, Dr. Betzig worked with practitioners to refine the microscope concept to best serve the needs of the scientific community; and

WHEREAS, because of Dr. Betzig's remarkable discoveries, optical microscopy has entered the nano-dimension; scientists are now able to visualize pathways of individual molecules inside living cells, with possible applications in better understanding Alzheimer's, Parkinson's, and Huntington's diseases; and

WHEREAS, Dr. Betzig will share the Nobel honor with two other scientists, Stefan Hell of Max Planck Institute for Biophysical Chemistry and William Moerner of Stanford University for their separate work on high-resolution microscopes; and

WHEREAS, as the first Nobel Prize winner from Loudoun County, Dr. Betzig brings honor to the Commonwealth and the scientists, engineers, advisors, and staff of the Janelia Farm Research Campus; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the General Assembly hereby commend Eric Betzig, Ph.D., on receiving the 2014 Nobel Prize in chemistry for his work on microscopy; and, be it

RESOLVED FURTHER, That the Clerk of the House of Delegates prepare a copy of this resolution for presentation to Eric Betzig, Ph.D., as an expression of the General Assembly's admiration for his brilliant contributions to the scientific community.