

Contact: Carrie D. Wolinetz, PhD  
(301) 634-7650  
[cwolinetz@faseb.org](mailto:cwolinetz@faseb.org)

## **BREAKTHROUGHS IN BIOSCIENCE DESCRIBES DEVELOPMENT OF HPV VACCINE AGAINST CERVICAL CANCER**

*Bethesda, MD* – The Federation of American Societies for Experimental Biology (FASEB) is pleased to announce the release of the publication “Viruses, Cancer, Warts and All: The HPV Vaccine for Cervical Cancer,” the latest article in the *Breakthroughs in Bioscience* series. This [publication](#) describes the scientific clues that established the connection between Human Papillomavirus (HPV) and cervical cancer, ultimately resulting in a vaccine against this deadly disease.

Each year, cervical cancer kills more than 250,000 women per year worldwide. In the United States alone, 11,000 new cases are diagnosed annually. Our story shows how a century of basic science culminated in the first vaccine to prevent cervical cancer and other diseases caused by Human Papillomaviruses. When scientists first proposed that viruses could cause a contagious form of cancer, the idea seemed too radical to be true. Yet decades of fundamental research, from insight into the basic biology of viruses, to findings about how benign growths like warts are formed, to strange pathways involving the legend of the mythical jackalope, eventually led researchers to the breakthrough discovery that some forms of HPV cause cervical cancer. Once this connection was made, the race to develop a vaccine was on and this article outlines how cutting edge new technologies, from DNA hybridization to generation of virus-like particles, allowed scientists to create an effective and safe vaccine that can prevent the vast majority of cervical cancer cases. Readers will learn how the HPV vaccine works, the role of Pap smears, and what the future of cervical cancer vaccines holds.

The *Breakthroughs in Bioscience* series is a collection of illustrated articles, published by FASEB, that explain recent developments in basic biomedical research and how they are important to society. To obtain free copies of these publications, visit the *Breakthroughs in Bioscience* website (<http://opa.faseb.org/pages/Publications/breakthroughs.htm>) or, for hardcopies, contact FASEB’s Office of Public Affairs at (301) 634-7650 or [opa@faseb.org](mailto:opa@faseb.org)

*FASEB is composed of 21 societies with more than 80,000 members, making it the largest coalition of biomedical research associations in the United States. FASEB’s mission is to enhance the ability of biomedical and life scientists to improve—through their research—the health, well-being and productivity of all people. FASEB serves the interests of these scientists in those areas related to public policy, facilitates coalition activities among Member Societies and disseminates information on biological research through scientific conferences and publications.*