

In the Summertime

It may be the season to relax, but there's much work to be done

Summer is now in full swing. As if we're not already busy with our work schedules, now comes the added fun of juggling vacations—for the organization, that often means figuring out how to fill in for someone who is taking some well-earned personal time. For the individual, that can mean a relaxing escape that ends with an extra-large pile of work waiting at your desk and hundreds of emails marked “urgent” upon your return.

Whether you spend your summer getaways on beaches, bike paths, visiting relatives, traveling, barbecuing, or taking in a ball game, we at AlphaBioCom hope you and your family enjoy any downtime you may have and make the most of these beautiful summer days and nights.

If you're looking for some beach reading (or reading while in the car or on the plane to your vacation destination), we're happy to help. In this edition of *AlphaBioCom Monthly*, we look into one of the most crucial cancer-related discoveries of the last decade—the discovery that there is a direct relationship between human papillomavirus and the development of cervical cancer. The discovery has helped revolutionize prevention and screening for cervical cancer.

In addition, this issue continues AlphaBioCom's celebration of 10 years as an industry leader in medical and scientific communications. We offer a glimpse back to some of the technologies and businesses that were ubiquitous in 2005 that are nearly extinct just 10 short years later. We'll also introduce you to two more members of the AlphaBioCom team, and show how we strive not only to be leaders in what we do in the office, but also how we help make our communities better as well.

Again, we invite you to check out the new and improved AlphaBioCom website (www.AlphaBioCom.com) and feel free to leave comments and suggestions about our newsletter and our organization. We can be found on Twitter at @alphabiocom, and you can connect with us on LinkedIn.

Enjoy your summer! We'll see you again next month!



NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE

- 05** Awarded jointly to Barry J. Marshall and J. Robin Warren “for their discovery of the bacterium *Helicobacter pylori* and its role in gastritis and peptic ulcer disease.”
- 06** Awarded jointly to Andrew Z. Fire and Craig C. Mello “for their discovery of RNA interference - gene silencing by double-stranded RNA.”
- 07** Awarded jointly to Mario R. Capecchi, Sir Martin J. Evans, and Oliver Smithies “for their discoveries of principles for introducing specific gene modifications in mice by the use of embryonic stem cells.”
- 08** Awarded to Harald zur Hausen “for his discovery of human papillomaviruses causing cervical cancer,” the other half jointly to Françoise Barré-Sinoussi and Luc Montagnier “for their discovery of human immunodeficiency virus.”
- 09** Awarded jointly to Elizabeth H. Blackburn, Carol W. Greider, and Jack W. Szostak “for the discovery of how chromosomes are protected by telomeres and the enzyme telomerase.”
- 10** Awarded to Robert G. Edwards “for the development of in vitro fertilization.”
- 11** Was divided, one half jointly to Bruce A. Beutler and Jules A. Hoffmann “for their discoveries concerning the activation of innate immunity,” and the other half to Ralph M. Steinman “for his discovery of the dendritic cell and its role in adaptive immunity.”
- 12** Awarded jointly to Sir John B. Gurdon and Shinya Yamanaka “for the discovery that mature cells can be reprogrammed to become pluripotent.”
- 13** Awarded jointly to James E. Rothman, Randy W. Schekman and Thomas C. Südhof “for their discoveries of machinery regulating vesicle traffic, a major transport system in our cells.”
- 14** Was divided, one half awarded to John O’Keefe, the other half jointly to May-Britt Moser and Edvard I. Moser “for their discoveries of cells that constitute a positioning system in the brain.”
- 15** The recipient(s) of the 2015 Nobel Prize in Physiology or Medicine will be announced in October.

Gone, not Forgotten

So much can fade away in one decade

A lot can happen in 10 years. It's remarkable to think about how many businesses and technologies that were ubiquitous and seemed critical to our lifestyles in 2005 have fallen by the wayside.

For instance, how did you relax and unwind in 2005? Perhaps you went to Borders to pick up a good book. Maybe you stopped by Blockbuster Video to rent a movie. Or did you swing by Circuit City to grab the newest CD by Nickelback (if so, shame on you)? And if that stop at the local Genuardi's supermarket was going to make you late for dinner, don't worry about it. Even if you didn't have a cellphone at the time, you could grab a couple quarters and find a payphone at the local strip mall, or outside a convenience store. It was probably located right next to one of those R2-D2-shaped blue mailboxes.

So much has changed in the last 10 years. The technological breakthrough of the video-capable iPod was showcased in October 2005 (Later known as the iPod Classic, Apple stopped production on the click-wheel

devices in 2014). Though DVDs had supplanted VHS as the preferred method of watching videos and TiVo and DVR were rising in popularity and availability for recording, an estimated 94 million Americans still used a VCR in 2005. The last major Hollywood movie to be released in VHS format was "A History of Violence" in 2006, and two years later, the last major US supplier of prerecorded VHS tapes, Distribution Video Audio, Inc., shipped its last truckload. Similarly, some 442 million audio cassettes were sold in the US in 1990. In 2009, 34,000 were sold as compact discs (which now also find themselves on the endangered list) and the rising digital download technology made cassettes all but obsolete.

The rise of the Internet has drastically changed the way newspapers (and journalism as a whole) and travel agencies operate. Websites such as Google Maps and Mapquest as well as smartphone apps have rendered the traditional paper map all but extinct. Remember loading 35 mm film into your camera and hoping you'd get some good pictures from the roll of 36 images? Now, the memory card in your digital SLR captures thousands of images



While some photographers still prefer film, the rise of digital photography has made 35mm film all but obsolete.

before it's filled to capacity. Perhaps your parents owned a massive set of encyclopedias when you were younger. Even watches have become less common now that cellphones display the time with no need for winding or changing batteries.

Life, business, and technology are all about changing and adapting to the needs and wants of the public. Much like you, we at AlphaBioCom continue to survive and thrive because we are willing to adapt and shift in order to meet the always transforming needs of our clients.

Some are not so lucky, though. They are relegated to nostalgia, the discount bins, or a trivia question on "Jeopardy!" On this page, we'll take a quick look at some of the businesses, devices, and technologies that played a huge part in our lives in 2005 that have since gone the way of the dodo.



Some things that were widely seen or used in 2005 that you rarely, if ever, see in 2015 (clockwise from top left): payphones, USPS mailboxes, a 56K dial-up modem, the iPod Classic, Borders bookstores, paper maps.



HPV and Cervical Cancer

The discovery of the link between the two is a key development of the past decade

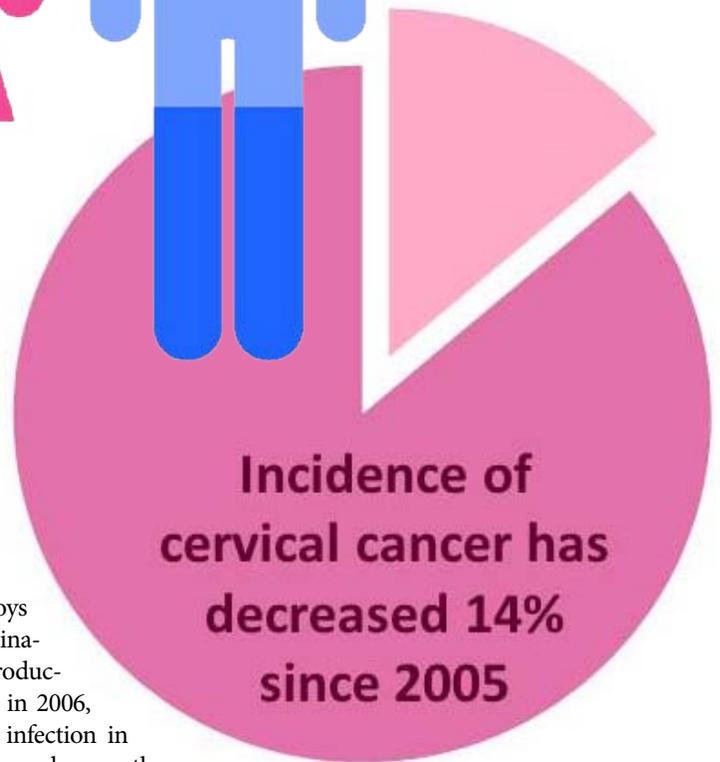
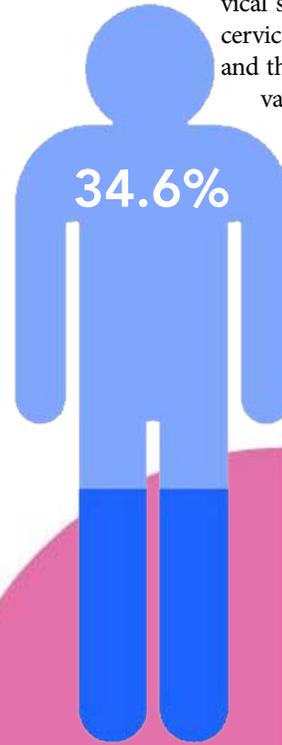
One of the most influential cancer-related discoveries over the past decades has been that the human papillomavirus (HPV) is directly responsible for later development of cervical cancer. This discovery, for which Harald zur Hausen received the Nobel Prize in 2008, has revolutionized prevention of and screening for cervical cancer, once the second most-common cancer among women.

While there are numerous types of HPV, there are about a dozen types that have been found to substantially increase cancer risk. While HPV infections generally resolve spontaneously, persistent HPV infections can result in development of cervical cancer over years or decades. Because of this, HPV testing and vaccination represent a two-pronged approach toward cervical cancer prevention and detection.

This discovery ... has revolutionized prevention of and screening for cervical cancer and could drastically decrease the risk of cervical cancer.

The development of HPV vaccines, in order to prevent HPV infection and thus reduce the risk of cervical cancer in women, has been a major development of the past decade. The first US Food and Drug Administration-approved HPV vaccine, was approved in the United States in 2006 and protects against HPV types 6, 11, 16, and 18, which confer a high risk of cervical cancer. Use in men was approved in 2009, improving the potential to decrease HPV infection rates. A second HPV vaccine was approved in 2009 and protects against HPV 16 and 18. HPV vaccination rates have increased steadily since the vaccines became available, and in 2013 approximately 57% of teen girls

2013 HPV vaccination rates among 13-to-17 year olds in the US



and 35% of teen boys received HPV vaccination. Since the introduction of the vaccine in 2006, vaccine type HPV infection in teenaged girls decreased more than 50%, suggesting that even without full implementation, HPV vaccination is substantially reducing infection rates.

The addition of HPV testing to cervical cancer screening also has the potential to increase the sensitivity of cervical cancer screening, allowing early treatment of precancerous lesions and preventing cancer in women. The first high-risk HPV test was approved by the FDA for cervical cancer

screening in 2003, and since then several more tests have been approved to be used in conjunction with cervical cytology (Pap) screening. This strategy of “co-testing” is more sensitive than cytology alone, improving cancer detection. The evolution of cervical screening has resulted in decreases in cervical cancer rates over the last decade, and the combination of early detection and vaccination should decrease cervical cancer rates further in the coming years.

AlphaBioCom has worked closely with industry leaders in women’s health technology to assist with raising awareness of the important issues surrounding HPV vaccination and cervical

screening technology. From development of educational materials, interactions with key opinion leaders, and assistance with publications presenting cutting-edge data, we have been able to support new technologies while providing physicians with the information they need as they implement these new technologies for the benefit of their patients.

Making our Communities Better

AlphaBioCom's Ed Shifflett is involved in numerous charitable endeavors

AlphaBioCom prides itself on being a leader in scientific and medical writing. But those who work for the company pride themselves not only on the top-quality work they do in the office, but on being good citizens and giving back to their communities as well as to the communities that nurture their respective passions.

While Ed Shifflett helps lead the way for the scientific writers, he that also epitomizes how AlphaBioCom members help in their respective communities. In 2013, Ed was involved with Bikes for Foster Kids in Delaware County, which collected money and almost-new bikes to be donated to foster children in Delaware County in Southeastern Pennsylvania during the holiday season. The initiative donated 16 bicycles to children who otherwise would not have experienced the fun of owning and riding their own bike.

An ardent Ironman competitor, Ed served as a member of the Ironman Foundation Newton Running Triathlon team in 2013 and 2014.

"There might be a misconception that avid triathletes are selfish," Ed says. "They train for hours on end and spend a lot of time preparing and improving their bodies for such a grueling challenge."

"Members of the Tri Team for Good still train long hours. That's for sure. But they also 'act selflessly in serving others within the IRONMAN communities and within their own communities. By participating in community service projects, athletes create a "greater good" throughout their race season," Ed says, quoting the mission of the Tri Team for Good.

A member of the Board of Directors for Suburban Seahawks Swim Club, a nonprofit

USA swimming organization, Ed has also participated in the 2014 Ironman Arizona as part of the team that raised around \$30,000 for KEEN Phoenix (<http://www.keenphoenix.org>), a nonprofit volunteer-led organization that provides one-to-one recreational opportunities for children and young adults with developmental and physical disabilities at no cost to their families and caregivers, and he and his teammates spent a day volunteering their time promoting physical activity and playing games with the kids.

At the 2013 Ironman Lake Tahoe, Ed's team raised nearly \$15,000 for Keep Tahoe Blue (<http://www.keeptahoeblue.org>), a nonprofit dedicated to protecting and restoring the environmental health, sustainability, and scenic beauty of the Lake Tahoe Basin; and the team spent a day volunteering their time and cleaning up the lake.

MEET THE STAFF

Colville Brown, MD; Associate Director of Clinical and Medical Affairs



In his role as Associate Director of Clinical and Medical Affairs, Cole provides scientific editorial assistance and clinical guidance to the staff at AlphaBioCom.

Following his education at Howard University's College of Medicine, Cole was accepted into The Hospital of the University of Pennsylvania's Internal Medicine residency program. He spent time as an Assistant Director for Wakefield Cottage, LLC, where he still serves as a Consultant. Cole has nearly 3 years of agency medical writing experience.

Cole has experience across a wide range of medical affairs and scientific communication programs and publications activities. Cole's core skills include clinical medical management, scientific team leadership, and engaging key opinion leaders. Dedicated to the advancement of medical science and the dissemination of scientific communications, Cole is invested in the science of medicine and how it can best improve health outcomes.

Cole joined AlphaBioCom in February 2012 as a Scientific Communications Manager, and was promoted to Associate Director of Clinical and Medical Affairs in June 2013.

Claire Daniele, PhD; Scientific Communications Manager



As a Medical Communications Manager, Claire works with the scientific lead and assists with development of individual publication outputs, including abstracts, posters, slide decks, and both primary data and review manuscripts.

Claire earned a bachelor's degree in the Biological Basis of Behavior at the University of Pennsylvania in Philadelphia, and a PhD in Neurobiology and Behavior from Columbia University in New York. She then served a four-year postdoctoral fellowship at the University of Chicago.

Claire has co-authored numerous papers that have been published in various medical journals, and was awarded a National Institute on Drug Abuse (NIDA) Training Program Fellowship while at the University of Chicago.

Claire joined the team at AlphaBioCom in February 2015.



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