

## CHANGING THE WAY THE WORLD TAKES TEMPERATURE

A world leader in industrial and medical non-invasive temperature technology, Exergen has hit new levels of recognition with its innovative Temporal Thermometer.

**FRANCESCO POMPEI** sheds some light on this award-winning product.

**Why all the attention to a medical device in the public press?**

**Francesco Pompei.** Taking temperature is by far the most common medical test performed – approximately 10 billion times per year worldwide, at all care levels including at home, and is a shared experience by all people. It is also one of the few things in medical care that everyone, including the patient, understands. The idea of accurate temperatures with a gentle forehead scan renders the insertion of thermometers into body cavities obsolete, which immediately improves everyone’s medical care experience and appears to be a natural attention-getter.

**Was cost a major issue?**

**FP.** Yes. Improving care without reducing costs is only one-half of an innovation. Both are necessary in order for an innovation to succeed in a lasting way. The reduction in disposable use associated with temporal thermometry is a major financial benefit, as well as a major reduction in waste. Combined with the care benefits of gentleness, speed, and non-invasiveness, everyone wins.

**Was reluctance to change a major issue?**

**FP.** Yes. There is a natural predisposition in medical care to resist change, which is healthy and appropriate most of the time. In our case, we were proposing a new method of taking temperature employing the forehead, a site that has been used for 5000 years for fever detection, but no one had ever been able to be make it accurate enough to replace the body cavity thermometers. It has taken us 10 years from the initial market introduction, more than 30 published studies, and about 2.5 billion temperatures taken with the



The Exergen Temporal Thermometer was recently honored in a list of 25 Smartest Products of the Decade, along with iPod, Netflix, Blackberry, Google, and other well known innovations. The list was compiled in the December 2009 issue of *Inc. Magazine*, a widely read and respected journal focused on entrepreneur executives. The Temporal Thermometer was described as making a “world of difference” and an example of how “inexpensive medical technologies pay huge dividends”.

A few years earlier, Exergen received the New England Innovation Award for “revolutionizing the old-fashioned, often awkward thermometer into an accurate and easy magic wand”.

Temporal Thermometer, to achieve today’s level of acceptance. There still remains some skepticism, which we are working to overcome.

**It appears perseverance is important to change what you do.**

**FP.** Perseverance is absolutely essential. It really starts with the scientific development of the technology, which in our case took about 15 years, making the total perseverance time

## FIVE-MINUTE EXECUTIVE

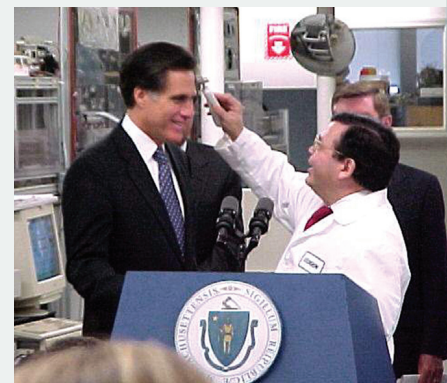
about 25 years. In addition there are always entrenched competitors protecting traditional technologies, many of them much larger than the innovating company, which need to be overcome. Fortunately early adopters, particularly large teaching hospitals, are usually willing to give an innovation an opportunity to succeed in the face of fierce entrenched competition. However, a successful new technology draws other competitors who try to copy the idea, which requires expensive perseverance to protect patented technology – 10 years and still ongoing for us.

There is always an opportunity for a good idea to succeed, but the entrepreneurial company must have both the will and wherewithal to persevere. Big changes in any field do not happen overnight.

**Where do you expect to be in the next five years?**

**FP.** We continue to move both the science and technology of temporal thermometry forward, integrating it with the latest patient care methods, and making it the standard for patient care. Hopefully in five years we will all be wondering why we ever used such primitive methods as inserting thermometers into body cavities. As stated in the *Inc. Magazine* article naming the Exergen Temporal Thermometer one of the ‘smartest products of the decade’, everyone will wonder: ‘how did we ever live without them?’

**Francesco Pompei** is Founder and CEO of Exergen Corporation, and holds 60 US patents in non-invasive thermometry for medical and industrial applications. He holds BS and MS degrees from MIT, and an SM and a PhD from Harvard.



Governor **MITT ROMNEY** having his temperature taken with a Temporal Thermometer during a visit to Exergen to promote job growth in Massachusetts.