

Prevention Technologies products are the accumulation of many humble yet brilliant researchers.

The mission has always involved recognition of significant medical problems that have cost-effective solutions.

The company has had several contributions. The name Prevention Technologies was not introduced until 2017. However, novel research began under the name FindingTheCure.org as early as 1991 when AIDS and mass vaccination delivery became crucial.

We were able to design a mass vaccination device to reduce the spread of AIDS in South America and Africa. A typhus epidemic provided us with the funding to make the prototypes and test them in several countries. Dr. Fechter paused his medical practice to teach health departments and the militaries the use of the improved vaccination device. This was part of his missionary work. There was no financial compensation.

Dr. Cary Fechter has a history of volunteer work either through missionaries or health agencies. His medical practice was successful enough to allow international travel and, with it, the recognition of failures of medical management.

He was able to create an AIDS-resistant mass vaccination device for the typhus epidemic of 1991. He designed a better, more cost-effective instrument, which became the vaccination device of choice. His research was funded by Coca-Cola, and he received no compensation. The new vaccination device manufactured in Cleveland had a base price of 1/20 of the cost of the World Health Organization, roughly \$10,000.

Such humanitarian efforts continued for the next decades as he created a fully functional intensive care unit communication system so that patients on ventilators and, more importantly, PAP, have a device to communicate between patients, nurses, and families. The communications devices are called Nurse Cher and Speak-PAP. Presentations were made to the largest ICU respiratory company in the world. Unfortunately, products that serve the good of patients and hospitals are not mass-manufactured unless they are profitable.

The company's most ambitious project was in 2003 when FindingTheCure.org and Finding Healthwork were created. The ambitious effort to use bioinformatics to support open-source research into the three enzymes that control cell cycle rebirth might have identifiable structures in cancer patients and could be a breakthrough in targeted therapies. The enzymes were located on P 52 ribosome and were called the cyclinases. Dr. Fechter, with his family's permission, invested over \$500,000. We posted on the website FindingTheCure.org our research, hired a brilliant

bioinformatics specialist from Boston, and were guided by Dr. Robert Friedman, a pioneer in bioinformatics. The gargantuan effort improved bioinformatics and closed the door on cyclinase manipulation at that time. Major advances require major efforts, and though a specific medication pathway was not established, the effort was very commendable.

In 2016, Dr. Fechter was asked to come to Boston and work with Harvard specialists and be paid for neurological research. This was successful in that the goals of the JP Morgan funded project were redirected toward known neuroprotective strategies instead of immunological research.

Competitive products have been disappointing due to the cost, the lack of concrete improvement in significant cognitive loss, and the many side effects associated with treatment. DHELM is a prime example of a multimillion-dollar loss for Biogen, its creator. Practicality of treatment and diagnostics prevailed, and medications already on the market, which helped sleep and mood disturbances, were combined and literature supported.

It was always realized that earlier diagnosis is critical in having successful medical management. Consequently, meetings at Alzheimer's and cognitive impairment conferences led to the practical use of eye tracking and neuropsychological testing. Both diagnostic arms are relatively inexpensive and very helpful in starting earlier medical and lifestyle approaches.

Combination medication patterns were applied. However, the cost of phase 2 and 3 clinical studies made the marketability of the combination medicines impractical. A thorough presentation was given to Mylan Pharmaceuticals, who admittedly said that distribution of the individual medications to patients without contraindication was the smarter yet non-profitable approach. Prevention Technologies agreed and will recommend or suggest such medications to their member physicians. A crucial article in the Journal of the American Medical Association showed that one of the medicines called modafinil can reduce the radiographic evidence of Alzheimer's disease by 28% per year. This was an amazing confirmation of the value of treating the underlying cause of dementia. Modafinil is a primary medication for excessive daytime sleepiness, and excessive sleepiness accelerates dementia.

Focus then was directed to early diagnosis and medically accepted ways of treating cognitive loss factors. The Smartest Lifestyle system was created and will remain our primary focus until a curative or reversing medication is discovered. The eight foundations of the Smartest Lifestyle system should be continued, even after a cure is found, since they improve quality of life, regardless of the degree of dementia.

Prevention Technologies has always been grateful to the humble, brilliant physicians who have kindly guided the program. The most important medications

for sleep include low-dose doxepin, amitriptyline, and in some states, we allow gummy bear marijuana. The question remains, what is the true benefit of increased sleep if it is not of deep brain wave quality? Consequently, the company is now focused on an inexpensive home-based quality analyzer so that physicians can try different doses and compare inexpensively at-home deep sleep quality.

The founder, Dr. Fechter, did hands-on research at assisted living facilities and independent living facilities, as well as with his own patients, and learned the benefits of a device which will facilitate compliance with the eight foundations. Several computers and tablets were tested, and the current Lenovo system offers functionality that allows a non-tech-savvy elder the most important high-tech internet opportunities. They have all been embedded into the Smartest Lifestyle tablet, and very importantly, the tablet and software applications are very affordable and therefore will be very effective.

The founder, Dr. Fechter, also did multiple continent volunteer work and recognized the difficulty of treating patients who have limited medical access. He then met with engineers and, as a specialist teaching physical diagnosis, designed a remote stethoscope primarily for the underprivileged villages in the third world.

It took an international pandemic, COVID-19, to realize the full potential of remote stethoscope examinations. Telemedicine became a primary tool while patients were afraid to visit physicians and used telephones and the internet to interact with patients. This occurred in 2020, and by that time, several vital sign-related devices did offer basic baseline knowledge of how severely ill patients were. However, the introduction of the remote stethoscope system will change the landscape of telemedicine as it allows complete auscultation of the heart, lungs, abdomen, and neck quite inexpensively.

Most of the funding has come from generous gifts from corporations such as Coca-Cola, JP Morgan, very successful surgical colleagues, and Dr. Fechter's personal investments. It is now clear that the Smartest Lifestyle tablet system, the remote stethoscope, and the tracking early diagnostic systems will be successful and become a part of cardio, pulmonary, and dementia-related medical practice in the future.

While not as financially promising as the products above, the ICU communication systems reduce complications and death. They also provide for an immeasurably important aspect of medical care: FEAR. Patient, family, and physician communications and their improvements will be a part of intensive care, regardless of profitability.