President’s Message ........................................... Dr. Akiko Tanaka

Yesterday, Today and Tomorrow … 25 Years of Research in Human Healing

Since its founding 25 years ago as Showa University Research Institute for Biomedicine in Florida, the Tampa Bay Research Institute has remained true to its mission: the study, cure and prevention of cancer and chronic infectious diseases.

Both the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) report that the leading causes of death throughout the world are chronic and infectious diseases. It is our goal and our life’s work here at TBRI to unravel the mysteries of chronic diseases such as cancer, hepatitis, herpes, influenza and HIV/AIDS and to develop effective treatments for these diseases.

One thing we learned early on in our research is that if we are able to modulate the body’s immune system, we can boost its ability to protect and defend itself against these life-threatening diseases.

Throughout our 25 years, the scientists at TBRI have remained creative, open-minded, and willing to be innovative in their pursuit of treatments for human disease. This approach has included investigating the therapeutic potential of herbal and plant extracts.

Just as aspirin originally came from the bark of the willow tree, many of the drugs we use today were originally extracted from plants. Indeed, components from pine trees such as cones, bark, seeds, and needles have been used throughout history as remedies for the treatment of various ailments.

At the beginning of the AIDS epidemic in the early 1980’s, TBRI tested one such folk remedy, extracted from pine cones, for its ability to block HIV infection of human cells in the test tube. It worked! And not only did it block HIV infection, it also blocked influenza and herpes virus infections in the test tube.

The scientists here at TBRI have perfected a method to extract the biologically active components from the pinecone and have obtained a patent for the process. Our scientists have since published more than 20 research papers on the remarkable properties of this substance, both in the test tube and in mice.

This amazing extract, scientifically known as a polyphenylpropenoid-polysaccharide complex (PPC), offers much promise as an orally administered adjuvant; an adjuvant is a substance that enhances the body’s immune response, leading to higher levels of antibody production.

Currently, there is no safe and effective orally-administered adjuvant has yet been approved by the FDA. Thus we continue our research to bring effective treatments utilizing PPC. We think that after additional trials PPC may well complement traditional medical treatments such as chemotherapy, surgery, antibiotics, vaccines and radiation by reducing side effects, shortening recovery times, boosting the immune system and reducing the severity of infections, thereby enhancing patient outcomes.

Our latest research results on PPC continue to be compelling. As with our earlier findings, we believe the impact on our mission will be profound. We firmly believe that through further research efforts we will be able to develop strategies to improve our bodies’ abilities to overcome these dreaded chronic diseases.

Throughout our first 25 years, we have been blessed with remarkable support from the local community, both financially and morally. Your help has been a catalyst for the discoveries we have made thus far. And with your on-going support, we are confident that we will continue to make the discoveries necessary to help us achieve our mission.
With considerable sadness, we at TBRI wish to inform you that we had to euthanize Sammy several weeks ago. She had suddenly become weak and appeared to be in some discomfort. Upon examination by the veterinarian, they found evidence of an advanced form of lung cancer.

After consulting with several veterinarians and Ms. Diane Conroy, who originally rescued Sammy as an abandoned dog, they agreed that it would be best to put an end to her discomfort.

Sammy loved the sound of our harpsichord. During Sammy’s final evening, Dr. Tanaka played “The Three Wise Men (Women),” a Japanese melody. Upon hearing it, she stood and started to walk about the lobby, then quietly lay down to sleep. The next morning, a warm Sunday, Sammy enjoyed the beach and some fresh air (please see the above photo). Then, that afternoon, she peacefully said Good Bye to all.

John Jessip was her primary owner, and Don Boniface was also a steady companion throughout her several years here at TBRI.

She was a first-hand witness to many notable events here at TBRI, and she will be missed.

Sammy, our “Scientific Spy,” left us with a legacy to combat cancer!

Confidential P.S.: While going through her belongings, a hidden compartment was found in her doggy bed. Inexplicably, a small diary was found. Her writings appeared to be encrypted. In collaboration with a retired cryptologist, we are slowly piecing together her writings. In future installments we will provide you with her most insightful observations on better health for our earthly world.

-TBRI Maintenance Staff

**Bird Flu — Potential Pandemic**

_by Drs. Mary Smith, Guy Bradley and John Jessip_

As you may have heard, a highly pathogenic bird flu virus (known as the H5N1 virus) is currently spreading through Southeast Asia and could potentially produce a world-wide epidemic (pandemic). While local epidemics of seasonal flu are not unusual, this virus’s potential to rapidly travel around the globe and cause extremely severe and fatal infections is unusual.

What makes this virus different? In nature there exists two major types of flu viruses that concern us, one type (type A) infects a variety of animals (ducks, birds, chickens, pigs, whales, seals and horses) while the other, type B, only infects and circulates within the human population. While type A is generally restricted to birds and other animals, on rare occasions a type A virus emerges with the ability to directly infect humans. These viruses are the ones most often associated with world-wide disease and the ability to cause severe and even fatal infections in humans. The H5N1 bird flu is one of these.

Since this is a virus to which humans have not been previously exposed, our immune systems are not able to adequately defend us from the infection. In the current outbreaks in Asia, Europe, and Africa, more than half of those infected with the H5N1 virus have died. Most cases have occurred in previously healthy children and young adults and have resulted from contact with infected chickens, ducks, and turkeys, or surfaces contaminated with secretions from infected birds. The symptoms associated with this infection have ranged from typical flu-like symptoms (e.g., fever, cough, sore throat, and muscle aches) to eye infections, pneumonia, severe respiratory diseases, and other severe and life-threatening complications.

So far, the spread of the H5N1 bird flu from person to person has been limited and has not continued beyond one person. Nonetheless, because all influenza viruses have the ability to change, scientists are concerned that the H5N1 virus could mutate and gain the ability to spread easily from one person to another. This event would signal the start of the pandemic. An especially severe influenza pandemic could lead to high levels of illness, death, social disruption, and economic loss. The effects of a pandemic can be lessened if preparations are made ahead of time. So, like we Floridians do for hurricanes, we must stay aware and be prepared.
Fiscally Fit .................................. by E. Paul Dietrich

One of the best resolutions you can make at any time of the year is to become ‘fiscally fit.’ And one of the easiest ways to start a program of fiscal fitness is to prepare a will. A will helps you arrange your estate assets and how they will be distributed. And you will be delighted to find that when you have prepared an estate plan, not only will you be on the road to fiscal fitness, you will also have increased peace of mind, knowing a critical part of your life planning has been completed.

If you have made plans for your financial future through a trust or will, congratulations! By taking this step, you have shown concern for your future well-being and that of your loved ones.

But even if you have made such plans, are you confident that those plans still meet your needs? Keeping your trust or will current and up to date are just as important as preparing them in the first place. It’s quite possible that you will never need to change your plans, unless you experience some of life’s most common events.

Financial circumstances may change, rendering your plans inadequate or obsolete: tax laws may also cause your plans to fail to best meet your goals.

A change in marital status is among the most common reasons for changing a will or trust. Those who have been widowed, divorced or married since making their plans should definitely review their financial and estate plans.

You may also have found, since your plan was drafted, that it has become apparent that your named heirs may have needs that are not what they were before: you might want to consider special friends in your estate plan; and after taking care of family and friends, you may want to remember the charitable organizations whose mission you support.

Consult your advisors if you believe changes in your plan are in order. It is usually not wise to attempt to make changes yourself, as you may invalidate the entire document you are trying to alter.

We would be pleased to assist if you and your advisors would like more information about ways to include Tampa Bay Research Institute in your estate plans. Your gift will leave a legacy that helps us continue our mission into the future. Feel free to call Paul Dietrich, our gift planning advisor, at (727) 576-6675. Your plans will be kept in strictest confidence.
### Tampa Bay Research Institute Enhanced Member Benefits

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<tr>
<th>Amount</th>
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<th>Benefits</th>
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<tr>
<td>$120+ annually or $10 per month</td>
<td>FRIEND</td>
<td>Newsletter and Friends Reception</td>
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<tr>
<td>$240+ annually or $20 per month</td>
<td>PATRON</td>
<td>Above, plus Annual Luncheon</td>
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<tr>
<td>$600+ annually or $50 per month</td>
<td>SILVER</td>
<td>Above, plus reception with the President</td>
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<td>$1000+ annually or</td>
<td>CORPORATE or GOLD</td>
<td>Above, plus private luncheon and behind the scenes tour with the President</td>
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<tr>
<td>$5000+ annually</td>
<td>PLATINUM</td>
<td>Above, plus planning session with Board members and a wall plaque</td>
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<tr>
<td>$25,000+ annually</td>
<td>FOUNDERS GROUP</td>
<td>Above, plus naming opportunities</td>
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This Summer, we invite you to pay tribute to the memory of a loved one, while supporting biomedical research.

Your memorial gift is greatly appreciated. Thank you for supporting the Tampa Bay Research Institute.

(Please send your gift in the envelope provided inside the Biogram, gifts will be listed in the Fall Biogram)