



tbri
IMMUNE HEALTH RESEARCH

A NOT-FOR-PROFIT ORGANIZATION
DEDICATED TO
BIOMEDICAL RESEARCH



BioGram
TAMPA BAY RESEARCH INSTITUTE

From the Board Chair



Board Chair
Clifford Cook

Pivotal Times

New and recent discoveries made at Tampa Bay Research Institute (TBRI) over the past several years have helped put the Institute at the promising stage of identifying the active molecule(s) in the polyphenylpropenoid-polysaccharide complex, PPC, which is derived from pine cones.

From our past research and numerous anecdotal reports over the decades, TBRI has proven that

its primary focus of studies for over 20 years—PPC—has a significant beneficial effect in directing the body's immune system to modify the progression of diseases ranging from allergies to cancer. PPC is a mixture of many different types of molecules, and it is likely that PPC contains more than one active molecule. The development of PPC as a drug requires identification and characterization of the active molecule(s).

The primary objective of our current research at TBRI is to identify the active molecule(s) of PPC by separating it into its component parts (fractions). The components will then be tested to determine their molecular properties and biological activity. This procedure typically generates many fractions, so it is essential to develop a test for biological activity (an assay) that effectively

and accurately measures the impact of PPC's active components on the immune system. Such assays are at the core of the procedures used by the pharmaceutical industry to identify lead compounds that may eventually become prescription drugs. They take time to develop and ultimately must be validated to be sure that they measure the sought-after biologic activity. Once the assay is validated and we have in hand the active molecule(s), we will be in a position to partner with larger research institutes capable of processing large quantities of PPC to study the pharmacologic properties of the active compound(s) and develop it into a drug.

TBRI is a pioneer, going where science has not gone before, as we know of no other research laboratory that has taken on such a project of breaking down this crude compound and efficiently assaying for biological activity through the separation process.

We want to welcome our new friends to TBRI who have been invited to our new **Inside the Institute** luncheons. These events have recently started and will continue, as we are actively broadening our base of followers in the community. These events are an introduction to TBRI, its mission, a review of our past achievements, progress with

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ENDORSEMENT BY THE SCIENTIFIC ADVISORY COUNCIL (SAC)

The SAC recently reviewed the scientific progress and achievements of TBRI's scientists. I speak for the Council to acknowledge that we are very impressed with the quality and quantity of the research findings presented. They have generated substantial scientific evidence that pinecone extract has significant effects on the immune response. It is our expert opinion that they have developed a rational and practical research plan to determine how pinecone extract can be used to improve the health and outcomes for patients with allergies and to enhance the effectiveness of vaccines for infectious diseases and for cancer. Their research has substantial medical implications and deserves support.

—Yancey Gillespie, Ph.D.
Professor of Neurosurgery & Director of
Brain Tumor Research Program
University of Alabama at Birmingham



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Chris S. Youmans

Pivotal Times (Continued from page 1)

our latest science, many testimonials from people whose lives have been changed, and an endorsement of our science by our independent Scientific Advisory Council (SAC).

We express abundant thanks to Mr. and Mrs. John Galbraith whose extraordinary \$1 million challenge gift—which has inspired all of us who care about TBRI’s pivotal research—to step up our financial support of TBRI in unprecedented ways. Our Board is committed to sustaining TBRI’s important research, and we thank you, donors and friends, for your continued support and faith which has never been more important and appreciated!

\$1 Million Galbraith Challenge Gift

Mr. and Mrs. John Galbraith of Charlottesville, Virginia, former long-time residents, corporate and community leaders and philanthropic champions to numerous worthy Tampa Bay area organizations, have made a \$1 million challenge gift to rally new levels of private support for TBRI’s promising immunological research. In making the gift, Mr. Galbraith stated, “I am delighted by the prospects of doubling our gift in support of research breakthroughs that are well within TBRI’s grasp. Go for it!”

Mr. and Mrs. Galbraith’s challenge gift will match all contributions and documented pledges dollar-for-dollar in support of TBRI’s research, including equipment, essential scientific personnel and operations. TBRI will be working diligently to meet this 12-month catalytic challenge and encourages all previous and new supporters to create a compounding impact.

Research & Equipment Giving Priorities

.....to be matched by the Galbraith Challenge Gift

TBRI has embarked on a 3-year plan that will strengthen its facilities, provide new scientific instrumentation and attract established scientists essential to support a modern and robust research program now at its most promising stage of identifying the active molecule(s) in PPC. Immediate funding is sought for the following priorities:

| Immediate Priorities | Gift | Match | Total |
|--|----------|----------|-----------|
| Junior level Principal Investigators (annual) – 3 needed | \$40,000 | \$40,000 | \$80,000 |
| Technicians (annual) – 3-6 needed | \$15,000 | \$15,000 | \$30,000 |
| Autoclave and steam generator | \$50,000 | \$50,000 | \$100,000 |
| AIDS iSpot Reader Spectrum (ELISPOT) | \$24,500 | \$24,500 | \$49,000 |
| BioRad ChemiDoc XRS+ system | \$10,250 | \$10,250 | \$20,500 |
| Bio Tek plate washer | \$ 8,550 | \$ 8,550 | \$17,100 |
| Bio Tek plate spectrophotometer | \$ 8,450 | \$ 8,450 | \$16,900 |
| Milli-Q integral water purifier | \$ 6,250 | \$ 6,250 | \$12,500 |
| -80°C Freezer (critical backup freezer) | \$ 5,500 | \$ 5,500 | \$11,000 |
| Freezer inventory software and barcode system | \$ 1,450 | \$ 1,450 | \$ 2,900 |

TBRI News

New Board Members

Congratulations to the Officers of the Board of Trustees elected in April:

- Clifford Cook, Chair
- Brian W. Anderson, Vice Chair
- Michael E. Williams, Treasurer
- Allen Loyd, Secretary
- Judy Morris-Hardy, Immediate Past Chair
- Akiko Tanaka, Ph.D., President

We welcome Mr. Anderson as the new Vice Chair.



Mr. Brian W. Anderson is a Managing Partner and a Founding Principal of HealthEdge Investment Partners where he shares management responsibility for HealthEdge.

Mr. Anderson has had more than 20 years experience in private equity, investment banking and finance including with firms such as Robert W. Baird & Co., Baird Capital Partners, First Chicago Equity Capital and First Chicago Venture Capital.

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Mr. Anderson received his M.B.A. from the University of Chicago Graduate School of Business and also holds a B.S. in Finance, Operations and Strategic Management and Philosophy, summa cum laude, from Boston College.

Mr. Anderson currently serves on the Board of Directors of Enaltus, Infinity Home Care, LifeSync Corporation, Omega Healthcare Management Services Pvt. Ltd. and The Corridor Group. He previously served on the Board of Fund I companies Dispensing Solutions, Advanced Bio-Technologies, Woodbury Health Products, and POC Network Technologies.

We are also pleased to welcome new Board members Holli E. Kile and Chris S. Youmans.



Ms. Holli E. Kile is Corporate Marketing Director of Career Path Training Corporation, a multi-disciplinary corporation in the field of career education and training throughout the U.S. consisting of 14 educational institutions, as well as various subsidiaries. Ms. Kile received her B.S. degree in Business from Eastern Illinois University.



Mr. Chris S. Youmans is President of United Capital Funding Corporation, the leading provider of professional accounts receivable-based funding and credit management solutions in the United States. Established in 1997 by Jerry Curley, a former TBRI Director, United has successfully partnered with entrepreneurial firms with annual revenue from startup stage to over \$50 Million. With clients in over 34 states, United possesses the financial resources to serve firms seeking to improve their cash flow and reduce costs. United is headquartered in the Tampa Bay area, and also has regional offices in Nashville, Tennessee and Cleveland, Ohio. Mr. Youmans received his B.S. degree in Accounting from the University of South Florida.

We also welcome back our valued on-going Board Members for 2013-2014:

John C. (Jack) Bierley, Esq.
Gary R. Froid, ChFC, CLU
John E. Kearney
Bernard Roizman, Sc.D.
Barbara Sheen Todd
Richard J. Whitley, M.D.

In the Lab



Dr. Guy Bradley

This has been a very exciting and productive summer. To begin with, we've continued our collaborations with faculty and students at Eckerd College and have added a full time member, Tina Pastoor, to Dr. Soichi Haraguchi's laboratory and a part time person to the "Worm" lab.

The groups at Eckerd College are involved in the hunt for the active molecules in our pine cone extract, termed PPC (Dr. Polina Maciejczyk), determining the molecular pathways affected by the pine cone extract (Dr. Denise Flaherty), and the synthesis of anti-cancer compounds that work with PPC to generate a more effective anti-cancer immune response (Dr. David Grove). All three groups made significant progress this summer and have provided us with some important insights as to how PPC might be helpful for a variety of human ailments.

Just recently, important findings from the research performed by Dr. Guy Bradley, Nichole Holm and Dr. Akiko Tanaka implicate a specific point in the immune response where PPC appears to exert its

effects (a manuscript, G. Bradley, et al., has been submitted). These results will help us to better understand why PPC has long been associated with remarkable effects in cancer patients and will help us to determine ways to optimize the use of PPC to stimulate anti-cancer immune responses.

The research performed by Elizabeth Marinaro in our "Worm" lab has resulted in the development of novel ways to evaluate the molecular and genetic response of worms (*C. elegans*) to the types of stresses often encountered by our own cells in the presence of cancer and other maladies. Using these same techniques, Julia Billington, an Eckerd College student who worked full-time in TBRI's "Worm" lab this summer, has furthered the research on PPC's ability to reduce stress responses in *C. elegans* and has produced some very interesting findings. We anticipate that she will continue this research as part of an independent study that could eventually culminate in an Eckerd College Senior Thesis project.

We look forward to continued progress and great discoveries.

TBRI Summer Intern Rohit Reddy's Antioxidant Research

Last February, Rohit Reddy, a Shorecrest Prep high school student, won a first-place award at the Pinellas County Science Fair and has received a total of three awards to date based on his excellent research work, entitled *Antioxidant Levels in Sports Drinks*. This summer, Rohit, a rising senior, worked in TBRI's *C. elegans* ("Worm") lab. His research on antioxidants will focus on development of anti-aging strategies under Dr. Guy Bradley's supervision and will be the subject of a research paper.



Save the Date!

TBRI's Annual Community Reception
6:00 p.m., Tuesday, November 5, 2013
Carillon Hilton

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