President's Column

New CEO Search A Challenge

Last month Dr. George DeTitta informed our Board of Directors that, effective April 2008, he intends to relinquish his position as Chief Executive Officer of Hauptman-Woodward Medical Research Institute. George has served as our CEO during what arguably has been one of the most exciting and significant periods of our growth. He led the Institute through the design and construction of our signature building and has excelled in the challenging job of leading a group of independent and creative thinkers. He has allowed each individual at HWI the freedom to work on research which inspires her and the room to grow and develop to her full potential.

We fully support and understand his decision to return to the lab next year, and are confident that the search committee and board will secure a successor who will build on the foundation that George has established to continue the lab's success into the future.

However, the selection of a new CEO is never an easy task for any organization. For Hauptman-Woodward, it is particularly difficult because our new CEO must possess in great measure at least two distinct and rare qualifications. He must, first and foremost, have the ability to lead a group of independently motivated research scientists who are capable of carrying out biomedical research of sufficient quality to generate support for their work. In addition, in order not to compromise his ability to lead, he must himself be an eminent scientist, capable of conducting biomedical research of such quality as to command the respect of the staff he leads.

Our Board faces a daunting task; a year will not be too long.

Hauptman-Woodward CEO, Executive Director Announces Resignation

HWI Board to Conduct Local, National Search to Place Successor by April 2, 2008

As many of you may now be aware, Hauptman-Woodward’s Chief Executive Officer and Executive Director Dr. George DeTitta officially announced on Monday, April 2 that he would be returning full-time to his lab within one year’s time.

Below is a conversation with DeTitta that may answer some questions you have about this decision.

STRUCTURES: Why have you decided to resign your position as CEO and what is the effective date?

DETITTA: It was always my intention to serve in the CEO role for a limited time. In fact, I have been in a conversation about stepping down that dates to early 2005, and at that time I informed the board that I intended to step down no later than 3 years hence. I reiterated that decision in 2006 and in early 2007. My primary passion is in the lab and I am anxious to devote all of my time to scientific work once again. The effective date of the transition will be April 2, 2008.

STRUCTURES: How long have you been in the executive position?

DETITTA: I have served in an executive capacity since July 1999.

STRUCTURES: During the next year, do you plan to continue to implement new ideas and make leadership and directional decisions for the Institute?

DETITTA: I will continue to lead with strength and enthusiasm and use the same approach which I have used to lead the Institute since the first day I took the executive position. It will be business as usual. We expect to continue recruiting new scientists, compete for grants and conduct basic research.

STRUCTURES: Are you leaving HWI entirely?

DETITTA: I am not leaving HWI at all. I am simply returning to the lab and handing the CEO reins over to someone else.

STRUCTURES: What do you anticipate your role will be with HWI on April 2, 2008?

DETITTA: I fully expect to return to the lab and focus solely on my research to develop new tools and methods for more effective and efficient high-throughput crystallography.

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**Hauptman-Woodward Scientist Receives $1.7 million NIH Grant**

Dr. Michael G. Malkowski receives grant for multi-faceted work that one day may lead to better therapies for treating arthritis and other inflammatory diseases

Malkowski’s research is focused on understanding why and how that process happens – knowledge which is critical to the long-term future development of a new or combined therapeutic approach for the treatment of arthritis and other inflammatory diseases, such as asthma, atherosclerosis, cardiovascular diseases, etc., with fewer unwanted side effects. His research has the potential to have medical relevance for literally millions of people worldwide.

“The medical relevance of this work for so very many people who suffer from inflammatory diseases – and who now in some cases, suffer from the side effects of the medications that are intended to treat these diseases is simply immense,” Malkowski said. “On a number of levels this study is similar to work I have conducted previously in my career so it is a topic that continues to fascinate me.”

**How long will the study take and who will conduct the research?**

The study is expected to take approximately five years, but may take longer based on the outcome of the research. The work will be led by Malkowski and conducted by all members of the Malkowski lab which includes post-doctoral fellows Drs. Christopher Goulah and Mary Rosenblum, senior research associate Tracy Lloyd, research aide Adam Krol, as well as graduate students Danielle Simmons and Alex Vecchio.

**Is the work supported by others in addition to NIH?**

Malkowski’s initial funding for the project came from the Arthritis Foundation. With those funds, Malkowski was able to conduct all of the preliminary research needed to both test the viability of his project’s hypothesis, and to develop the study to a level where it could be considered for funding by the NIH.

“This work would not have been possible without the support I received from the Arthritis Foundation. They believed in the work and supported the project until it reached a stage where we could then leverage their investment into additional financial support – in this case, support from the NIH,” Malkowski said. “This is the ideal case where a foundation or a private philanthropist supports a scientist’s work through its beginning stages and sees a return on their investment not only in the results of the research, but also in the resulting support from other financial backers.”

**Why is this important?**

Aspirin has proven over the last 100 years to be one of the safest and least expensive pain relievers used to treat a variety of ailments. While the aspirin affects both enzymes, it has a radically different effect on each. This difference leads to the importance of Malkowski’s research. The aspirin inhibits COX-1 making it nonfunctional and improving heart functionality. But in the case of COX-2, the aspirin forms another complex that has very potent anti-inflammatory properties.

**Aspirin’s impact on COX-1 and COX-2**

Aspirin is known to inhibit COX-1, which is responsible for maintaining a healthy blood platelet and thus preventing blood clots. This is why aspirin is used to prevent heart attacks and strokes. Aspirin is also known to inhibit COX-2, which is responsible for maintaining normal immune function and is essential for tissue healing. These two different effects of aspirin are important to understand as they can be used to develop new treatments for diseases such as arthritis.

**How does aspirin inhibit COX-1 and COX-2?**

When people take anti-inflammatory medications, such as aspirin, the aspirin inhibits an enzyme in the body (COX-2) which normally responds to injury by producing pain and swelling. Hence the aspirin gives the patient relief. For similar reasons, aspirin is effective in the prevention and treatment of cardiovascular conditions, and in that case the aspirin binds to a different enzyme (COX-1) to keep veins open for blood flow.

**What is the impact of aspirin on COX-1 and COX-2?**

Aspirin can cause stomach ulcers and bleeding, but it is also effective in preventing heart attacks and strokes. People who take aspirin for these conditions must weigh the benefits against the risks.

**What is the difference between COX-1 and COX-2?**

COX-1 is responsible for maintaining a healthy blood platelet and thus preventing blood clots, while COX-2 is responsible for maintaining normal immune function and tissue healing. These two different effects of aspirin have different therapeutic applications in the body.

**How does aspirin affect COX-1 and COX-2?**

Aspirin is a non-steroidal anti-inflammatory drug (NSAID) that inhibits both COX-1 and COX-2. When aspirin is taken, it binds to the active site of the enzyme, preventing it from functioning.

**What is the role of COX-1 and COX-2 in the body?**

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Buffalo’s Only Nobel Laureate Celebrates His 90th Birthday With Friends and Family

Historically Significant Collections of Nobel Prize and Handmade Mathematical Stained Glass Unveiled

A storm blew into Buffalo on February 14 but it didn’t put a damper on Hauptman-Woodward’s spirit. In fact, Buffalo’s only Nobel Laureate – our very own Dr. Herbert A. Hauptman – celebrated his 90th birthday with more than 200 friends, family and colleagues from around the world at a cocktail reception in the atrium of the Hauptman-Woodward building.

Permanent collections of his Nobel Prize and mathematical stained glass pieces were unveiled. Friends and supporters who were unable to be here for the celebration are invited to come see the collections.
Dr. Wayne Schultz and Timothy Umland have received a $100,000 grant from the William G. McGowan Charitable Fund to finance their work in studying infectious diseases. The grant will be used to initiate a new project in virus-host interactions.

Umland and Schultz are both very enthusiastic about how the grant will affect their research. “This will help us to determine how a virus interacts with its host,” Umland said, “specifically the SARS virus and how it interacts with human cells.”

In addition, the seed money provided by the McGowan Foundation will allow them to generate critical preliminary results necessary to obtain federal funding, Schultz said. This is not the first time McGowan has supported HWI. In fact, in 2004, McGowan provided funding to develop a Center for the Study of Infectious Diseases at HWI. The National Institutes of Health previously provided $600,000 for Schultz and Umland to study SARS virus proteins required for virus replication.

**What is depicted in this art glass piece which graces HWI’s front windows?**

The art glass incorporates a small sampling of different elements which are related to the science of crystallography and/or have been the result of work done by HWI scientists.

The three large circular images are Laue diffraction patterns of lysozyme. Each spot in the pattern represents diffraction from a plane of atoms in the crystal. The pattern of molecules running in a wave through the bottom of the piece is the packing pattern of a steroid studied by Dr. William Duax depicting how the molecules arrange themselves in a crystal lattice. Duax has had a 35-year long study of steroid hormones, their analogues and the enzymes with which they interact.

The mathematical formula which runs across the length of the art glass is Dr. Herbert A. Hauptman’s minimum function formula which he and his group used to develop a suite of computer programs to help solve large crystal structures.

**Only Employee to have worked in all Three HWI Buildings**

In April 2005, Cegielski joined her HWI colleagues in the move into the current state-of-the-art facility at 700 Ellicott Street. When asked to describe her thoughts on the new facility, Cegielski says, “phenomenal,” which says it all.

**Longest-Tenured Employee May Be Longest-Ever Volunteer**

Although Cegielski officially retired on October 31, 2006, she has stayed on as a volunteer to continue her work in medical research as a way to keep her mind active and to give herself some structure and routine. Cegielski also sees this as a good way to keep in touch with the many friends that she has become so close with over the years at HWI. When asked how long she plans to stay on as a volunteer, Cegielski replies with a smile, “indefinitely.” When she is not hard at work in the lab, Cegielski still has plenty to keep her running. She is an avid crafter, and enjoys reading and traveling to visit her children and grandchildren. Cegielski said that she also has a growing addiction to word and number puzzles.

Peggy Cegielski has come a long way since the start of her career in the late 1950’s. Although lab techniques and technology have changed, one thing remains the same - Cegielski’s charm and quiet demeanor. She is one of the reasons HWI is a special place to be.
Top scientists all over the nation are being impacted by the budget cuts at the National Institutes of Health and other federal funding sources and additional cuts are expected.

Unfortunately, the scientists at Hauptman-Woodward are no exception. In fact, even some of our most seasoned scientists are having grants triaged for lengthy periods of time or losing grants altogether. As a result, it is more important than ever to bring in more unrestricted gifts to support our scientists’ work.

“Due to the current economic climate for basic research, we know this is becoming an even more pressing priority in terms of our fundraising efforts,” Chris Greene, chair of the Hauptman-Woodward Foundation Board said. “Our endowment is very limited so we simply do not have the available resources to fill the budget gap. That is why we really must raise supplemental funding to help offset the dollars cut from HWI researchers.”

The overall research funding climate has resulted in significant reduction in grant awards — in fact, more than half-dozen research projects have over the course of the past two years had significant financial impact on the Institute’s financial bottom line.

HWI CEO and Executive Director George DeTitta said “The projects being conducted here are among the nation’s most promising and innovative basic research studies, but that doesn’t protect us from facing the cuts. To continue to support our research, we are relying on the generosity of our donors to provide significant gap funding at this very critical time because we are conducting studies that are peer-approved nationally and deemed among the best basic biomedical research being conducted in the country.”

Dr. Walter A. Pangborn, HWI executive vice president, said that the allocation of donor dollars may be the difference between our scientists reaching or failing to meet their research goals. “When your work is so deeply affected by a universal cutback by the NIH, difficult decisions have to be made. This means making a choice about maintaining unfunded employees, continuing unfunded projects and so on,” Pangborn said. “Donor dollars may provide crucial support for the completion of some of our projects.”

“Unfortunately, HWI has no alumni, as colleges and universities have, no sick children, parents or friends who have been cared for in our facility,” Dr. Jane F. Griffin, principal research scientist, said. “Donating for basic research requires the vision to see the possible - many steps down the road - and to comprehend that understanding how our bodies work at the molecular level is really the beginning of cures.”

Greene said it is becoming increasingly essential to have flexible funds from our donors to allow the HWI management team to decide where funds are most critically needed at any given time. “The Foundation Board obviously is acutely aware of the need,” Greene said. “We are working hard to find ways to fill the gap, but if the government continues its cuts, the research and our staff will be impacted.”

DeTitta added that collaboration has never been more important. “The success of basic research is interlinked with the generosity of our donors – and has been since the founding of HWI more than 50 years ago and that formula can continue to work,” DeTitta said. “But each side needs to hold up its end of the partnership.”

Dr. Vivian Cody’s NIH grant was cut by 25% due to Congress never passing the 2007 budget.

TWO GREAT WAYS TO MAKE THE MOST OF YOUR GIFT TO HAUPTMAN-WOODWARD

With tax time still fresh in our minds, here are two great opportunities available to make the most of your charitable gifts, as well as receive valuable tax benefits.

**NYS TAX CREDITS**
Donors who give to the Cures Begin Here Capital Campaign are eligible for an additional New York State Tax credit. These tax credits are available to individuals and for-profit corporations, basically any entity that pays tax in NYS. These credits are worth 25% for any cash gift up to $400,000, made specifically to the capital campaign. This credit is in addition to the standard NYS and federal deductions, but limited to 50% of your total NYS tax liability.

**PENSION PROTECTION ACT 2006**
The law allows individuals over the age of 70 ½ to donate to a charity directly out of their IRA, and exclude the withdrawal from their taxable income. The IRA distribution must be paid directly from the trustee/custodian to the qualified charitable organization. This distribution can be counted toward your required minimum distribution amount (RMD), avoiding paying the income tax on the amount of the withdrawal, or, in addition to it.

For more information on either of these programs, please consult your financial advisor, and call Laurie Krajna at HWI at 898-8597.