HWI to Manage Experimental Station at Argonne National Laboratory

Hauptman-Woodward will in January 2010 begin a new venture when it assumes management of an experimental station at the Argonne National Laboratory Synchrotron Advanced Photon Source (APS) located outside Chicago, Illinois.

“This opportunity promises both to bring in useful amounts of revenue and to create visibility and collaborative potential in the world of big pharma. HWI is contracting to manage a major facility owned jointly by nine large pharmaceutical firms located at Argonne,” HWI CEO Dr. Ed Lattman said.

“The management process will provide many opportunities to interest one or more of these firms in HWI technology (such as the high throughput crystallization laboratory) or drug target research.”

Along with crystallographers around the world, HWI scientists use large, centralized facilities called synchrotrons, which generate intense x-ray beams. Generically, synchrotrons contain a large central ring around which high-energy electrons circulate, spinning off x-rays. Spaced around the wall of the ring are apertures through which x-rays are harnessed for experiments. Just outside each aperture is an experimental station containing expensive and sophisticated equipment enabling the experiments to be conducted.

"The IMCA-CAT contract is testimony to both the scientific credentials of our faculty and the depth of the management team at HWI," Jim Biltekoff, HWI Board Chairman, said. "We look upon this as a growth opportunity for our people and a vehicle to showcase our capabilities to a wider audience."

The financial model for synchrotrons is a hybrid. The government (in the U.S. usually the Department of Energy) pays for the ring, while experimental teams pay for the individual experimental stations. Teams may be university consortia or other non-profits, governmental agencies, or industrial partnerships. To compensate for the subsidy contributed by the government, each experimental team has to give 25 percent of the time on its station to so-called general users, people with grants who need access to the intense X-rays and specialized equipment.

Each of these experimental stations is a significant small business, with an average of ten employees and a budget in excess of $1 million annually. HWI will manage the experimental station at Argonne known as IMCA-CAT.

continued on page 16
Georg Riedel, President and 10th generation at the over 300 year-old Riedel Crystal, led more than 350 local community members in mid-October at Kleinhans’ Music Hall on a journey of experiencing the difference a glass can make to the taste of wine. Event Chair Isabel Robitaille (co-chair Mike Robitaille was unavailable to attend due to a professional commitment), HWI CEO Dr. Ed Lattman and HWI Chairman of the Board Jim Biltzoff each gave brief remarks.

Is it possible that the shape of a glass can actually make wine taste better? A little more than a decade ago, that notion would have been scoffed at even by winemakers and connoisseurs. Twenty years ago, the Riedel name was largely unknown in the United States. Today the Riedel glassmaking company is internationally known for being one of the finest crystal makers in the world and their company president came to Buffalo to showcase their crystal to raise funds for Hauptman-Woodward.
The 11th Annual Upstate New York NMR Symposium held in late fall at HWI was primarily intended to encourage interaction between NMR groups in New York and surrounding states. This year the event, organized by HWI research scientist Dr. Roopa Thapar, featured 13 speakers, as well as 17 poster presentations.

The areas of focus highlighted in this year’s symposium were new NMR methods in solution and solid state NMR, and the use of high resolution NMR methods to characterize the structure and dynamic properties of biomolecules. The event is also an opportunity for open dialogue between graduate students, postdoctoral fellows and senior NMR spectroscopists.

This year the speakers were: Brian Antalek (Eastman-Kodak), Arindam Ghosh (SUNY Buffalo), Jim Kempf (Rensselaer Polytechnic Institute or RPI), Alexander Grishaev (NIH), Joel A. Tang (NYU), Markus M. Ann McDermott of Columbia University and J. Patrick Loria of Yale University were the two featured keynote speakers.

Sponsors of the event included: Cambridge Isotope Laboratories, Bruker Corporation, SIGMA-ALDRICH, Varian Incorporated, University at Buffalo Department of Biochemistry, Roswell Park Cancer Institute and Wilmad-Labglass.

The one-day event was dedicated to identifying new ideas for partnerships to advance STEM education in New York State and to fuel the innovation required for future economic growth. This one-day meeting is among a series of events being hosted across the state to increase awareness of STEM education and to find more effective means of developing collaborations and innovative approaches to STEM education.
Judith A. Feldman, senior vice president, information technology and chief information officer, Independent Health, has been elected to HWI’s Board of Directors. Feldman is responsible for all information technology (IT) activities, including infrastructure, architecture, application development, re-engineering processes, networks, outsourcing, computer and auxiliary operations and support. She monitors emerging technologies to determine their maturity and applicability to the enterprise. Feldman assesses the relative impact of emerging technology on strategic business needs and interprets their meaning for the executive team. She determines long-term information needs and develops overall strategy for systems development and hardware acquisition and integration.

Feldman is also responsible for IT program and project prioritization, recommendation, management, monitoring, tracking, and post review. She aids in identifying business application needs and developing solutions that support the company’s overall business goals and objectives. She also represents the company externally as required in matters related to information technology. Prior to joining Independent Health in January 2009, Feldman was the assistant vice president, information technology at Fidelis Care.

She is a prior board member for Jewish Family Service and Info Tech Niagara and also is a recipient of the Digital Diva award.

Feldman earned a master’s degree in information systems management from the University of Southern California, where she graduated with honors, and a bachelor’s degree in computer science from the State University of New York at Albany, where she graduated cum laude.

She and her husband Ed Schunk reside in East Amherst, New York with their children, Adam and Leah.

Dr. Jane F. Griffin Receives Lifetime Achievement Award

Dr. Jane F. Griffin, HWI Principal Research Scientist, was awarded the Lifetime Achievement Award at the annual Buffalo Business First Women of Influence Awards Ceremony held in October at Salvatore’s Italian Gardens. The annual award recognizes an exceptional woman who has been successful in her career while contributing back to the community over the course of her lifetime through her leadership and volunteerism.

Dr. Jane F. Griffin

Tara A. Ellis Receives 40 Under Forty Award

Tara A. Ellis, HWI Director of Public Relations and Government Affairs, recently was awarded a 40 under Forty award by Buffalo Business First. The 18th annual award recognizes honorees from a wide variety of professions ranging from elected officials to a Mercy Flight Pilot to non-profit employees. The award winners are recognized for their records of professional success and community involvement.

Tara A. Ellis

Dr. Pei (Paige) Chun Hang

Hired as Postdoctoral Scholar at HWI

Dr. Pei (Paige) Chun Hang has joined HWI as a postdoctoral scholar. Hang is the first new employee hired to work as a result of HWI’s recent Department of Defense contract. Hang will be working with Drs. Timothy Umland and Wayne Schultz on the study of how viruses mutate and transfer from animals to humans. This contract gave HWI a total of $2,832,480 to conduct research including the hiring of three postdoctoral scholars.

Hang recently received a Ph.D. in Chemistry from the University of Waterloo located in Ontario, Canada.

Nithya Krishnan Joins HWI as Research Associate

Nithya Krishnan has joined HWI as a research technician in Dr. Roopa Thapar’s lab. The Thapar laboratory is focused on molecular recognition and assembly of large multi-protein and protein-RNA complexes that play important roles in regulation of RNA-mediated gene expression.

Krishnan previously was a research assistant at the University at Buffalo (UB) where she worked on a master’s thesis in gene expression in Erythroid Terminal Differentiation. She is also a teaching assistant and tutor at UB where she is currently pursuing her master’s degree in biotechnology. She received her bachelor’s degree in chemical engineering from Anna University, India in May 2007. In addition, Krishnan worked at the Central Leather Research Institute in Chennai, India as a research intern.

Dr. Pei Chun Hang

David F. Schneeweiss

Managing Director and Senior Portfolio Manager of Investments with Wealth Management and Consulting, Wells Fargo Advisors LLC, has been elected to the Hauptman-Woodward Medical Research Institute’s Board of Directors.

An active and generous community volunteer, he was Chairman of Endowment for the Boy Scouts of America Area 3, for New York State. He served as Council Vice President for Endowment and is currently a member of the Executive Board for the Greater Niagara Frontier Council. He also served as President of the Board of Directors for the Masonic Medical Research Laboratory in Utica from 2006 to 2009. He has served as Chairman of the Board of Trustees of North Presbyterian Church and has been active in the Cornell Club of Western New York and the Cornell Advisory Board for the Parker Center—Brown School of Business.

Schneeweiss has received recognition for both his involvement with the Securities Industry and civic endeavors. He was honored as the Financial Advisor of the year for 2007 and 2008 for Wachovia Securities, the Silver Beaver for Distinquished Service to Youth, and the American Eagle Scout Honoree Award by the Greater Niagara Frontier Council. He was appointed to the Cornell University Council in recognition of his leadership to the University. Masonic recognition include being conferred his 33rd Degree by the Scottish Rite, an honorary degree for his significant contribution to Masonry; he was also given the Red Cross of Constantine in 2006 by the Royal Arch.

He received his bachelor’s degree in Biology in 1974 from the University of Bridgeport in Connecticut and his MBA in 1980 from the Johnson Graduate School of Business at Cornell University, where he majored in business finance.

He and his wife Hallie reside in Williamsville, New York and they have three children.

Dr. David F. Schneeweiss

Alexander McPherson, Ph.D., has joined HWI as a part-time principal research scientist.

A long-time HWI collaborator and internationally acclaimed molecular biologist, he has specialized in X-ray diffraction analysis of protein, nucleic acid and virus crystals, Atomic Force Microscopy studies of biological structures, and the mechanisms of macromolecular crystallization.

A professor of Molecular Biology and Biochemistry at the University of California at Irvine and author of several books, he also holds a patent for a crystal-growing apparatus using vapor diffusion techniques. He maintains editorial positions with nearly a dozen scientific journals and has published more than 300 papers. McPherson has held a number of prestigious fellowships including the American Cancer Society Fellowship; the Damon Runyan Cancer Foundation Fellow; an NIH Training and the Ford Foundation Fellowship. He has been honored with the Pankuchen Award for research and teaching by the American Crystallographic Association, the medal for Outstanding Scientific Research by NASA, and the Faculty Research Award at UC Riverside.

He has been an invited speaker at more than a hundred scientific conferences and seminars worldwide. For 22 years he has been an instructor in the Cold Spring Harbor Laboratory course in X-ray Diffraction Methods in Biology. He is a consultant for a number of pharmaceutical companies and private organizations including Merck and Co., Abbott Laboratories, Wyeth, Biogen-IDEC, Monsanto and Nova Nordisk. He was a U.S. Principal Investigator for NASA, and his experiments have flown on the U.S. Space Shuttle, The Russian Space Station MIR, and the International Space Station.

McPherson received his bachelor’s degree in Physics from Duke University, his Ph.D. in Biological Sciences from Purdue University, and completed his postdoctoral research at the Massachusetts Institute of Technology.

He will spend half the year in California and half the year in Buffalo, New York.

Local Non-Profits Team Up to Help Area Students Learn More About Science

The Western New York Women’s Fund, The Buffalo Museum of Science recently collaborated to help provide high school and middle school female students with an opportunity to learn about science in Western New York. HWI’s Dr. Jane Griffin led tours and gave mini seminars for nearly 50 area students who participated in this program.
The Stafford Fellowship was established by then board chair, Constance Stafford Constantine, as part of Hauptman-Woodward’s plan to support young scientists. Constantine is the granddaughter of Helen Woodward Rivas, Hauptman-Woodward’s founding benefactor. The fellowship was funded by the Constance W. Stafford Trust (trustees: Walter F. Stafford III, Reid W. Stafford, Constance S. Constantine and Robert Plache), Walter & Sue Stafford, William and Margaret Constantine, and Walter and Constance Constantine.

“Donors who provide funds for endowments such as the Stafford Fellowship Program receive satisfaction from the knowledge that their funds live on by providing ongoing funding to help support graduate education at HWI,” said Kristin Sutton. When Huether and Sutton complete their educational careers at HWI, other graduate students will be chosen.

The Stafford Fellowship is a permanent endowment. For more information on how you can partner with this fund and support graduate education at HWI, please call Laurie Elliott Krajna at 716-898-8597 or email: lkrajna@hwi.buffalo.edu.

Hauptman-Woodward again participated in the Holiday Open Studios and Galleries presented by Artists in Buffalo Inc. in early December.

Only one of two participating non-profits, HWI hosted more than 25 vendors during the event making it the single largest site. Each artist donated 20 percent of their sales to support life-altering research at HWI.

Joe Luft, Research Scientist

Family man, dedicated scientist, and guitarist

Where are you from originally?
I am originally from Canajoharie, NY, a small town located 230 miles east of Buffalo. It’s located in the incredibly picturesque Mohawk Valley. The town was home to Beach-Nut, has a fantastic art gallery, and is small enough that you know almost everyone, which often worked to my disadvantage. I graduated from Canajoharie High School with the last “big” senior class of 120 students.

How long have you worked for HWI?
I started my life at HWI in January 1985 during a student internship and continued working at the lab full time after graduating from college.

What educational and career paths did you take that led you to where you are today?
One of my professors, at D’Youville College, was Dr. Dale Swenson, a scientist at HWI. He arranged an interview with a very enthusiastic Dr. William Duax who offered me an internship crystallizing steroids. After graduating from D’Youville in 1985, with a B.A. in chemistry, and a minor in math/computer science, I was hired by Dr. Vivian Cady. Initially she taught me how to crystallize and solve structures of small molecules. A few years later, her research moved on to proteins. The first protein we studied, and still my favorite, was transthyretin. I was able to go through the entire process, starting with human plasma and through a series of somewhat disgusting purification steps producing these beautiful crystals. After painstaking efforts using a precession-camera and a dark room to develop the film, we could see differences in the diffraction patterns that let us know if we had successfully bound different small molecules to the protein. Vivian is an enthusiastic mentor; she instilled a sense of perseverance, and gave me the freedom to explore research and develop techniques in the lab. This led to a fantastic and longstanding collaboration with Dr. George Dettita; we shared an interest in crystallization with a desire to understand the process, and use this information to develop new crystallization techniques. We have had some great successes over the years, developed tools used by other investigators, and enjoyed coming up with these ideas over a cup, or several cups of coffee. George taught me how to develop and test a hypothesis. He taught me how to be a scientist. Two decades later we continue to work together. While I still have a keen interest in crystallization and remain very active in this field; my most recent and extremely productive collaborations with Dr. Eddie Snell have included not only crystallization but also another structure determination method that somewhat ironically does not require crystals called small angle X-ray scattering. Eddie’s a brilliant, enthusiastic and optimistic collaborator with an interesting sense of humor.

What is your favorite thing about Buffalo?
HWI is my favorite thing about Buffalo. The new building is absolutely beautiful, but it’s the people that make HWI special. Lunch at HWI is always interesting. The conversations shift gears in a heartbeat, jumping from one topic to another with only the slightest threads connecting the collective discussions. Over the years we’ve witnessed some fascinating things at that lunch table including walking crackers and dissolving fish. We learned of vanishing vegetables, and listened intently to conversations that at times resembled a twisted sort of group therapy session with comments that ultimately led to the same conclusion, laughter. Lunch is informative, there are some serious conversations about the latest news and science, but listening to the conversation from a distance, it is never too long before you hear the laughter. I work with a great group of people in the crystallographic lab; just genuinely nice, caring people, who won’t ever let a birthday slip by without decorations and cake to celebrate. I feel incredibly fortunate to be a part of HWI and to be able to be surrounded by so many outstanding people.

Can you tell us a little about your family?
I have a very caring and understanding wife, Karen. We met through a mutual friend who worked with Karen and was a friend of mine from college. Karen is a clinical laboratory scientist at Kaleida Health; she’s my best friend and is incredibly supportive. We have a daughter, Charlotte, who is going to be starting high-school next year, which pretty much says it all from my perspective. She absolutely loves to read, is a very good writer and artist. We are incredibly proud of her. The other member of our family is a Labrador retriever named Chapin. Most of my relatives, including my two sisters, parents and Grandmother still live near Canajoharie, most of Karen’s side of the family (she was one of 6 children) still live in and around Warsaw, NY where she grew up. I’m incredibly fortunate to have had such a wonderful and supportive family growing up and now.

What kind of activities are you involved with outside of work?
When I’m not at work I try to spend time with my family. I also spend a lot of time with guitars, reading about them, playing them, even building them. I’m a big fan of Charlie Chaplin too. I’ve read dozens of books about him and watched most of his 81 films. He was an incredible artist, a skilled actor, director, and composer.

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The Hauptman Society was created in 2008 to honor Corporate or Individual donors who contribute leadership unrestricted gifts of $1,000 or more annually. Joseph Voelkl, HWI Board Member, is chairman of the Hauptman Society. These gifts support HWI’s mission and life-altering research. Membership advantages include:

$1000 Member
Annual member event
Invitation to an exclusive speaker series
Behind the scenes tour of HWI and the diffraction lab
Name on the Hauptman Society plaque in the lobby

$2,500 Member
All of the above, plus Dinner with Hauptman-Woodward CEO

"Hauptman-Woodward is honored to receive these important donations which allow HWI scientists to contribute to cures to the diseases that plague our friends and families," Development Director Laurie Elliott Krajna said. “We had a great turnout in 2009, our first year of the Society. Dr. Deb Ghosh spoke to the group regarding his breast cancer research, and many of the members got a chance to ask questions and learn about how new research findings will lead to new targeted breast cancer drugs."

For more information on becoming a member of the Hauptman Society or to learn more about ways to support HWI’s research, please contact Laurie Elliott Krajna at 716-698-8597 or via email at lkrajna@hwibuffalo.edu.
What is IMCA and what will HWI’s role be?
The Industrial Macromolecular Crystallography Association (IMCA) is a consortium of (currently) nine firms forming a Collaborative Access Team (CAT) that has constructed, owns, and operates an experimental station, sector 17, at the Argonne APS. The principal role of the manager – HWI - is to serve as the employer of the sector staff. Other roles include representing IMCA to the APS, monitoring performance and safety, and interfacing between the needs of the companies and the staff. The project will primarily be run by Lattman, HWI Executive Vice President Dr. Walter Pangborn and HWI Research Scientist Dr. Eddie Snell with support from HWI’s finance and human resources teams under the direction of Chief Financial Officer Lisa Foti.

“There are many opportunities for collaborating with one or more of the firms, or with IMCA-CAT as a whole, in the development and/or use of tools developed at HWI and this is an exciting new opportunity for us,” Lattman said. “It will provide welcome diversification in our funding sources, as well as opportunities for staff development and new collaborations with our colleagues in industry.”

Dr. Lisa J. Keefe, Director of the IMCA-CAT, positions a crystal on the diffractometer at the IMCA-CAT beamline at Argonne.