Army Technology Transfer Awards

Scientists and engineers from the U.S. Army Soldier Biological and Chemical Command's Edgewood Chemical Biological Center (ECBC) received Federal Laboratory Consortium (FLC) Awards for Excellence in Technology Transfer. Winners were honored at the FLC Annual Meeting held in Little Rock, AR, last year.

The FLC is a congressionally chartered network of federal laboratories designed to promote and strengthen technology transfer nationwide. The FLC established this annual award to recognize individuals or teams from federal laboratories and commercial sector partners who have done outstanding work in transferring technology to the commercial marketplace.

Nominations are submitted by the laboratories and are judged by a panel of technology transfer experts from industry, state and local government, academia, and the federal laboratory system.

The award criteria are as follows:

• An individual or team of individuals has demonstrated uncommon creativity and initiative in the transfer of technology.

• The benefits to industry, state and local government, and/or the general public are significant.

• The achievements are recent.

A description of achievements and the names of recipients of Awards for Excellence in Technology Transfer follow.

The Biological Detection Kit (BDK). Increased awareness of biological agents as potential weapons of terror and mass destruction underscores the importance of finding a means to rapidly and effectively sample and detect agents. The BDK consists of sampling and detection equipment for biological agents. Sampling equipment provides a capability for handling large area surfaces, small solid samples, liquid samples, and air samples. Once samples are collected, they are screened for the presence of biological materials using generic assays that are integrated into a single package that can analyze for the presence of DNA, protein, and bacteria. The BDK uses techniques from food safety, personal air monitoring, and other monitoring arenas and integrates them with new approaches to create a technology that is easily used in the field.

The technology transfer effort from the BDK team, comprised of Dr. Peter Stopa, Philip Coon, Dorothea Paterno, James Genovese, Alan Seitzinger of ECBC, and Maurice Milton and Darlene Tieman of Science and Technology Corp., took several forms. A Cooperative Research and Development Agreement (CRADA) was established with New Horizons Diagnostics Inc. to package the kit. EAI Corp., another CRADA partner, further refined and marketed the BDK. Several other vendors, including Turner Designs Inc., Molecular Probes Inc., and Chemmetrics Inc., provided the BDK team with supplies, reagents, and specialized expertise. In addition, an Information Exchange Agreement was established with the Military Institute of Hygiene and Epidemiology in Poland that enabled joint development of the kit's spore luminescence protocol.

The efforts behind the BDK resulted in the development of the BioHaz, a system that enables users to sample and detect biological materials in suspect samples. The Response Equipment Corp., a subsidiary of EAI Corp., is currently marketing this product. The kit is also being marketed as the SWIPE sampling and spore luminescence kit by New Horizons Diagnostics Inc. HAZMAT teams in several cities, including Washington, DC, and Virginia Beach, VA, have used this technology in response to recent incidents involving suspected biological materials such as anthrax.

The Integrated Virus Detection System (IVDS). The IVDS represents a fundamentally new method for detecting and identifying viruses and nanoparticles. Capitalizing on the physical properties of size and density allows viruses to be counted and identified without the use of biochemical reactions. Dr. Charles Wick invented and developed the IVDS and transferred the technology to Virus Detection Systems Company LLC through an exclusive license.

Analysis and identification through the use of the patented IVDS led to a wide range of new discoveries, including the ability of some viruses to pass through filters, change easily, live a long time under harsh environments, and live in soil and water. Recent outbreaks such as the West Nile virus, other alphaviruses, influenza, and foot-and-mouth disease make this technology extremely useful and timely.

Several industries will benefit directly from the development of the IVDS. The bioprocessing industry will be able to use this technology to develop new products, including vaccines, and to expand into new regions of science and technology. Materials technology will use IVDS to refine its nanoparticle-based creations, which can have applications in a number of areas such as paints, coatings, and transparent films used as computer monitors and television screens. The computer industry will be able to produce newer and more complex computing devices with improved nanometer-sized separations and tolerances. Lastly, the IVDS has provided a new standard of measurement on the nanometer scale that relies on such techniques as electronmicrography and light scattering.

Other Army recipients of 2002 FLC technology transfer awards include the following:

AWARDS

• Brian Simmons, an employee with the U.S. Army Development Test Command, received the FLC Laboratory Director of the Year Award for directing the establishment of the Team Aberdeen Proving Ground (APG) Business Development Office (BDO) that serves as a single point of contact for the business community to access APG. Since its opening, the BDO has generated a number of technology transfer agreements and is recognized by the business, government, and academic communities as a vital resource.

• Dr. John Dinan, an employee of the U.S. Army Communications-Electronics Command Research, Development and Engineering Center's Night Vision and Electronic Sensors Directorate (NVESD), received the 2002 FLC Innovative Partnership Award for demonstrating the greatest commitment to the long-term results of technology transfer. As the head of the Microfactory Group at NVESD, Dinan nurtured technology transfer partnerships with several companies that participated in the continued development of infrared focal plane arrays.

• Rich Dimmick, an employee of the U.S. Army Research Laboratory (ARL), received the Harold Metcalf Award for his sustained significant service to the FLC. Dimmick's commitment to technology transfer and the FLC has been exemplified by his unwavering support of the Fire Fighting Task Force.

• James K. Wanko, an ARL employee, received an FLC Achievement Award for his overall contributions to the Army technology transfer program. Wanko coordinates the technology transfer efforts of all the Army's laboratories and centers.

The preceding article was submitted by James K. Wanko, the Army Domestic Technology Transfer Program Manager at the U.S. Army Research Laboratory, Adelphi, MD.

BOOKS

It's not the BIG that eat the SMALL … it's the FAST that eat the SLOW

By Jason Jennings and
Laurence Haughton
Harper Collins Publishers Inc,
New York, 2000

Reviewed by MAJ John H. Grimes, an Army Contracting Officer participating in the Training With Industry Program and assigned to Oak Ridge National Labs, Oak Ridge, TN.

Two California business consultants contend that speed is a business tool. Jason Jennings and Laurence Haughton traveled the globe probing some of the quickest thinking, fastest acting business powerhouses and produced a text summarizing the common conducts of the companies' competitive edges. In *It's not the BIG that eat the SMALL … it's the FAST that eat the SLOW* , the authors blend practical applications of speed into a first-rate business text.

The duo features several companies from diverse business sectors (e.g., Charles Schwab, AOL, Clear Channel Communications, H&M, TelePizza) and expound their commonality of speed as a competitive advantage. More than 30 practical tactics are identified and demonstrated with vignettes from the featured companies.

The practical lessons are presented in a way that makes this 250-page book a very fast, yet amazingly informative, read. The strategies are neatly organized into four broad areas: thinking fast, deciding fast, acting fast, and sustaining a fast organization. No single lesson takes more than five pages to provide an efficacious description, and each broad area could stand alone as a short lesson plan.

A recurrent theme in the book is grasping and improving on one's own competitive advantage. Ranging from spotting trends, to dismantling bureaucracy, to ignoring one's competitor(s), and eliminating speed bumps, the epicenter of most of the book's strategies is enhancing an organization's speed as a competitive edge.

"A 60-second heads-up" wraps up each of the 25 lesson-loaded chapters. Of particular value are the thought-provoking fill-ins accompanying many of the brief summaries. The authors have used reader participation to adeptly personalize the text to readers' peculiar business purposes. Indeed, this book is fruitfully begun at any point, but adding one's own notes to each of the 60-second summaries makes the text an invaluable future desk-side reference.

Nothing can diminish the successes of the featured companies, but the book's lessons generally emphasize efficiency over effectiveness, and it is probably better suited for business leaders than government servants. Nonetheless, the modern business lessons in this book are exceedingly relevant whether you're in big business; a small, private company; or government service. Thus, I add my voice to the many others in recommending *It's not the BIG that eat the SMALL … it's the FAST that eat the SLOW* to *Army AL&T* readers and all contemporary business professionals.