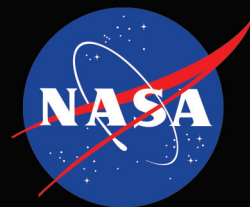


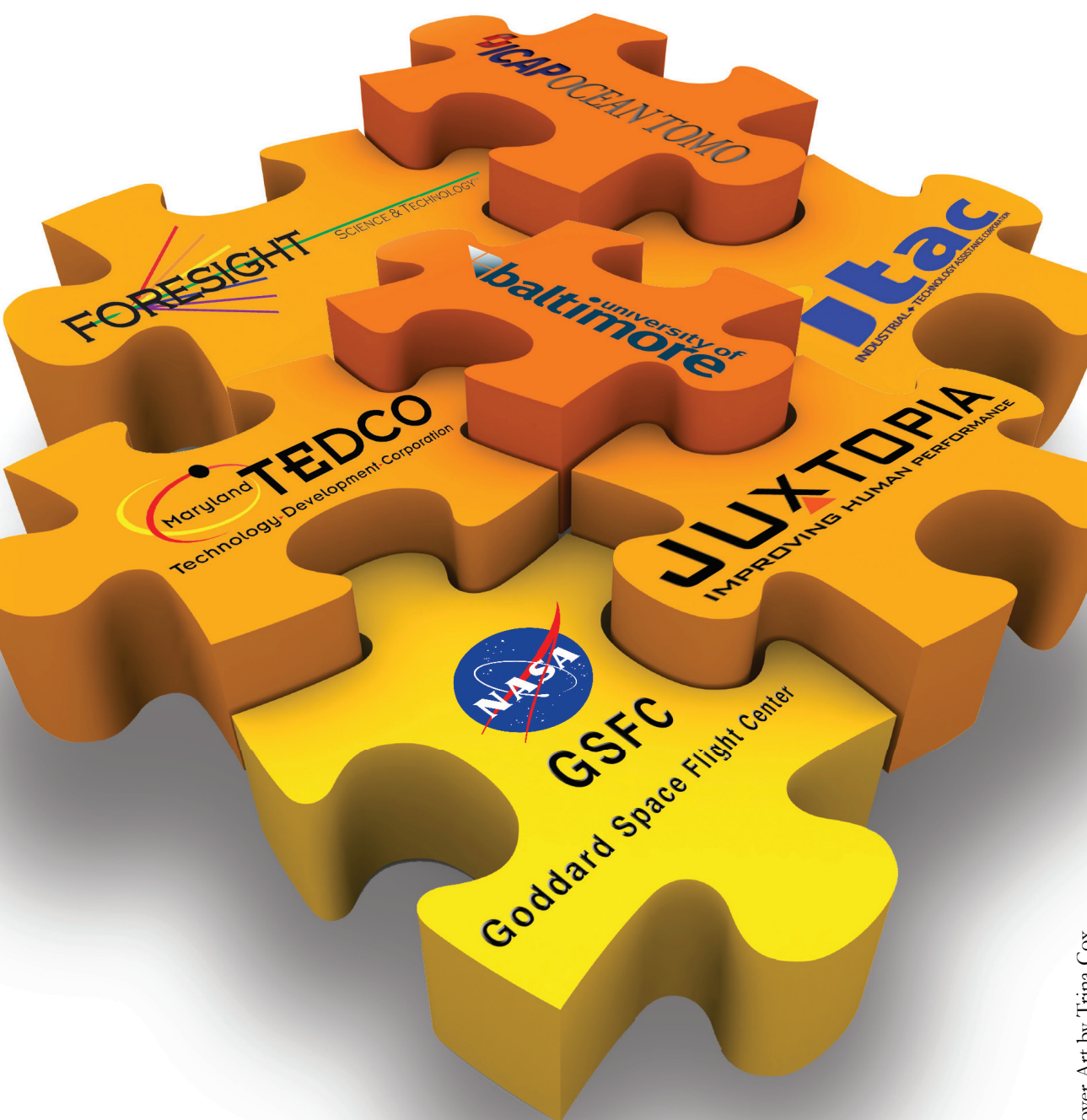
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Putting The Pieces Together in Partnerships



Cover Art by Trina Cox

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tech transfer

NASA Goddard Technologies Go to Business School

When it comes to commercializing NASA Goddard technologies, all perspectives are welcome, even those who may not yet have gathered a great deal of hands-on business experience in industry. To take advantage of this fact, NASA Goddard is collaborating with the University of Baltimore's Merrick School of Business to analyze and consider the commercial potential for a variety of NASA Goddard technologies. In this program, MBA candidates are presented with a number of NASA Goddard technologies. The students then devise potential applications and markets for these technologies.

NASA Goddard scientists and engineers will work directly with University of Baltimore faculty and MBA students to provide them with detailed information about their inventions. The goal is to equip the students with sufficient technical background about the invention and its capabilities to define potential new uses for it. In return, NASA Goddard will receive formal reports, assessments, and commercialization plans from the University. Potential partnerships between NASA Goddard and the University will also be explored. If the resultant proposed product meets certain expectations for commercialization, further work on it will be conducted by the students and faculty in cooperation with NASA Goddard.

According to Enidia Santiago-Arce of the Innovative Partnerships Program Office, the collaboration with the University of Baltimore includes some unusual aspects. "We often work with consultants to find potential applications for our inventions," explains Ms. Santiago-Arce, "but usually it's to determine whether or not it's worth pursuing IP protection for the invention. Our program with the University involves technologies we've already patented, we already know they have commercial value. What the students provide us are all kinds of new ideas for how these technologies could be used and turned into products. They look at each technology from different perspectives, and suggest applications and markets we might never have thought up on our own. We frequently encourage our innovators to think 'out of the box.' These students practically define 'out of the box' thinking!"

One recent example involved a gear bearing technology developed by Dr. John Vranish. "These bearings were originally developed for light robotic applications" states Ms. Santiago-Arce. "The students looked at the technology, and decided it could offer potential in an entirely new market -- wind-powered electricity generation systems. We hadn't even considered this possibility." Note that this could be a very timely suggestion -- recently, the U.S. Federal Energy Regulatory Commission (FERC)

conditionally approved the Atlantic Wind Connection, a \$5 billion project (which includes internet search giant Google as a major investor) to create an offshore transmission line that would connect up to 6,000 MW of offshore wind power to the US east coast, from Virginia to New Jersey. This may present significant market opportunities for improved wind power technologies. (For more information about Dr. Vranish's gear bearings, see http://ipp.gsfc.nasa.gov/ft_tech_gear_bearings.shtm.)

Thus far, the response from NASA Goddard engineers and scientists has been positive. "The innovators enjoy working with the students, and are an active part of the process" says Ms. Santiago-Arce. And as with all effective collaborations, both partners benefit from this program. "The students get a lot of cutting edge technologies around which to build real-world commercialization scenarios, work that might eventually lead to actual product development. In return, NASA Goddard gets a lot of new ideas for creative applications for our technologies -- and in some cases, possible new licensing opportunities." Ms. Santiago-Arce also reports that NASA Goddard has pursued similar programs in the past with other educational institutions in the state of Maryland, including the University of Maryland Baltimore County, and Howard County Community College.

For additional information about the collaboration between NASA Goddard and the University of Baltimore Merrick School of Business, contact Enidia Santiago-Arce (phone: 301-286-8497, email: enidia.santiago-arce@nasa.gov).



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