

BARC e-Update



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BARC is part of the USDA's Agricultural Research Service and encompasses programs at the Beltsville Agricultural Research Center; the U.S. National Arboretum in Washington, D.C.; and worksites in Chatsworth, New Jersey; Presque Isle, Maine; and McMinnville, Tennessee. BARC is the largest and most diversified agricultural research complex in the world. BARC's record of accomplishments and its ongoing programs have made it a world leader in agricultural research.

Blowing Our Own Horn!



BARC SCIENTIST RECEIVES PRESIDENTIAL RANK AWARD



Dr. Max Paape of the Bovine Functional Genomics Lab was awarded the 2006 Distinguished Senior Professional Presidential Rank Award for his work on cells in milk and the role that they play in defense of the mammary gland against bacteria that cause mastitis. Each year the President recognizes and celebrates a select group of career Senior Executives and Senior Professionals (research and staff scientists) with the Presidential Rank Award for exceptional long-term accomplishments. Winners of this prestigious award are strong leaders, professionals, and scientists who achieve results and consistently demonstrate strength, integrity, industry, and a commitment to excellence in public service.



BARC EMPLOYEES RECOGNIZED BY AMERICAN RED CROSS

American Red Cross

The 2005 – 2006 BARC Blood Drive Committee, comprised of **Lynn Carta** of the Nematology Lab; **Tina Paul** of the Fruit Lab; **Dawn Lopez** of the Bee Research Lab; and **Tee Yerby**, formerly with the Systematic Botany and Mycology Lab, was recently recognized by the American Red Cross Greater Chesapeake & Potomac Blood Services Region with a Recruitment Committee of the Year Award for 2005 – 2006. This group has been very creative in finding new donors and in continuing to attract long-time donors. Sponsoring blood drives has been a part of Tina's family tradition since she was young, so her knowledge and enthusiasm has been a great asset to BARC's drives.



Community Interest...

BARC SCIENTISTS GET THE WORD OUT ABOUT WATERSHED CONSERVATION



As part of outreach activities related to the Conservation Effects Assessment Project (CEAP) Choptank River Watershed Project, BARC scientists participated in the Chesapeake Executive Council Watershed Restoration Fair at Sandy Point State Park on September 21st. Hosted by Maryland Department of Natural Resources, this public event was designed to showcase the extensive work being done across the watershed by state and local governments, watershed and non-governmental organizations, and private landowners. The ARS booth was decorated with a colorful poster describing the project, and handouts detailing specific project activities as well as general information about BARC were provided to the many interested attendees. Governor Erlich and several Maryland Department Secretaries attended the event. Governor Erlich utilized the opportunity to present a number of awards to businesses and private citizens for outstanding environmental stewardship. **Dr. Laura McConnell** of the Environmental Management and Byproduct Utilization Lab and **Dr. Greg McCarty** of the Hydrology and Remote Sensing Lab are co-leaders of the Choptank River Watershed Project. Learn more about CEAP here: www.nrcs.usda.gov/technical/nri/ceap/.



PRESERVING CONTAINER PLANTS

For useful information on preserving your container plants during the cold winter months, check out the following U.S. National Arboretum webpage: www.usna.usda.gov/Gardens/faqs/containerpreserve.html.

UPCOMING CHANGES AT BARC

BARC, like most research organizations, is working to sharpen its scientific focus, to balance skills, and to ensure that funding is available to strengthen programs and meet new research challenges. To position itself for the future, BARC is working to reshape its workforce and is already retraining employees wherever possible. BARC now needs to take further steps to reconfigure its workforce. BARC has received authority from the Office of Personnel Management and the Office of Management and Budget for the Voluntary Separation Incentive Program (VSIP, also known as "buyouts") and Voluntary Early Retirement Authority (VERA, also known as "early outs") to reshape BARC's workforce to obtain appropriate cutting edge scientific skills and to secure the financial viability of its research program. For more information, contact Dr. Phyllis Johnson, BARC's Director, at phyllis.johnson@ars.usda.gov.



THE GROUND BEEF CALCULATOR

Ground beef, the most commonly consumed beef product in the U.S., is unique in that a wide range of products differing in lean and fat content are available in most retail stores. In order to provide consumers, scientists, and industry with the nutrient composition information for this variable product, **Dr. Juliette Howe** of BARC's Nutrient Data Laboratory (NDL), in cooperation with Dennis R. Buege of the University of Wisconsin and statistician Larry A. Douglass of the University of Maryland, have developed mathematical equations to explain the relationship between various nutrients in ground beef and the total fat content of raw ground beef. NDL recently launched the Ground Beef Calculator, a new nutrient search program based on these equations. The Ground Beef Calculator generates nutrient profiles for ground beef products containing any fat level between 5% and 30%. Users may also specify preparation



method: cooked patties, loaves, or crumbles. The nutrient profiles provide values for proximate nutrients (i.e., moisture, protein, fat, and ash), minerals, B-vitamins, folate, choline, vitamins A, E, and K, as well as major fatty acid classes including saturated and trans fatty acids. The Ground Beef Calculator complements the USDA National Nutrient Database for Standard Reference (SR), which is the foundation of most food and nutrition databases in the U.S. The Ground Beef Calculator and SR are used in the development of food policy, research, and nutrition monitoring. The Ground Beef Calculator is available on the NDL web site at www.ars.usda.gov/nutrientdata/GroundBeefCalculator.

DID YOU KNOW?

Because of its generally healthy overall condition, BARC's section of the Upper Beavercreek was recently selected by the Maryland Department of the Environment as the "reference" Coastal Plain stream for the development of Maryland's Anacostia Sediment Total Maximum Daily Load (TMDL).

Mark Your Calendar!



MID-ATLANTIC ORGANICS SUMMIT: Nov. 30

BARC is hosting the Institute for Local Self-Reliance (ILSR) and the Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) in their sponsorship of the Organics Summit with funding support from the U.S. Environmental Protection Agency, Region III. The purposes of this event are to share information on existing markets and initiatives in the region and best practices in place elsewhere, as well as to identify a strategy for expanding the organics recovery infrastructure in the region (collection, processing, and end-use). In the Mid-Atlantic region, markets for organics, including yard trimmings and food waste, are lacking, and information regarding markets to recover organics through composting is needed to significantly improve recovery. The Summit audience will include 50-75 federal and state regulators, solid waste managers, recycling coordinators, facility managers, compost experts, commercial and municipal composters, local government officials, and select food waste generators. Attendee Registration fee: \$30. Pre-registration is required. Register today!! Space is limited, and registrations will be accepted on a first come, first served basis. Visit www.macredo.org for registration information.

HARVEST ARRANGEMENTS

November 11, 9:00 a.m. – 12:00 noon

November 12, 1:00 p.m. – 4:00 p.m.

Learn the principles of floral design as you create a table arrangement using nature's bounty of natural materials. Adapt the arrangement through the winter holidays to include accents such as blue, silver, gold, red, and green to update the look. The instructor will share tips on care of floral designs for maximum longevity and beauty. All materials supplied. Fee \$45 (FONA members \$36). Visit the Arboretum's website or click here to register: [Registration required](#)

CURRENT TOPICS IN GENOME ANALYSIS 2006 – TELECONFERENCE CONTINUES



A mini-course covering contemporary areas in genomics and bioinformatics sponsored by the National Human Genome Research Institute, National Institutes of Health

Click here for [Course Information](#)

All seminars will be held in BARC's Auditorium, Building 003.

Tuesday, November 14, 10:00 a.m. - 11:30 a.m.

Jim Mullikin, Ph.D., Associate Investigator, NHGRI

"Studying Genetic Variation I: Computational Techniques"

Tuesday, November 21, 10:00 a.m. - 11:30 a.m.

Karen Mohlke, Ph.D., Department of Genetics, University of NC

"Studying Genetic Variation II: Laboratory Techniques"

Tuesday, November 28, 10:00 a.m. - 11:30 a.m.

Fiona Brinkman, Ph.D., Associate Professor, Department of Molecular Biology and Biochemistry, Simon Fraser University
"Evolutionary Analysis"

Tuesday, December 5, 10:00 a.m. - 11:30 a.m.

Dennis Drayna, Ph.D., Acting Chief, Section on Systems Biology of Communications Disorders, NIDCD

"Strategies for Disease Gene Identification"

HOLIDAY WREATHS

December 2, 9:00 a.m. – 12:00 noon **FULL**

December 3, 1:00 p.m. – 4:00 p.m.



Make your own designer-quality wreath for a fraction of the cost. The Arboretum will supply fresh greens, materials, and supplies, and you bring your imagination and holiday spirit! Fee \$45 (FONA members \$36). Visit the Arboretum's website, or click here to register for the December 3 course: [Registration required](#)

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