

## What's the Secret to Excellence in Science at St. Mary's School?

St. Mary's School has a history of strong primary and middle school science programs. For the last eleven years, St. Mary's has produced eight Grand Champions in the Junior Division at the Appalachian Regional Science Fair. Many more students have also won awards and recognition for high-quality projects. What is the secret?



Kate Longaker  
Grand Champion

*"...the world, far from originating out of chaos, resembles an ordered book; it is a cosmos. ...matter as such is 'legible'. It has an inbuilt 'mathematics.'"*

Pope Benedict XVI

### The St. Mary's Difference:

- **Committed, enthusiastic faculty who challenge students** — Our science teachers have received grants for classroom research, one holds a PhD in science, and one was named 2007 Biodiversity Educator of the Year by Discover Life in America.

- **Integrated science curriculum** — Teachers at all grade levels collaborate to hone students' writing and research skills as well as link science to other disciplines such as math, art, English, and history. A unique project-based learning class for grades 6-8 launched in 2008-2009 takes an interdisciplinary and hands-on approach to problem solving.



Project-Based Learning

- **Access to resources** — Our location in Oak Ridge brings science alive for our students. Students visit the Oak Ridge National Laboratory and enjoy the expertise of local scientists and researchers who work with and mentor them. The Smoky Mountains of East Tennessee also provide the ideal outdoor classroom, with middle school students participating in outdoor education programs at Wesley Woods and research opportunities through ATBI (All-Taxa Biodiversity Inventory).

- **Science and faith are partners in a Catholic school** — As Cardinal Schonborn, editor of the *Catechism of the Catholic Church*, says, "The biblical and Judeo-Christian faith has always been convinced, not only that we can and should believe in a Creator, but also that we are able to understand a great deal about the Creator with our human reason." St. Mary's School encourages our students to have respect and awe for God by investigating the universe He has created.



Fifth graders work collaboratively while learning how to use laboratory equipment.



ATBI:  
All-Taxa Biodiversity  
Inventory in the Smokies



Our primary science program features a hands-on guided discovery laboratory experience for students in grades Pre-K-4.

Primary  
Science  
at St.  
Mary's:  
Inquiry-  
Based  
and  
Hands-  
On!



## **St. Mary's Alumni and Academic Achievement Where are they now?**

75% of current high school juniors and seniors are enrolled in Advanced Placement classes.

### **Many of our graduates pursue future careers in science. Some areas in which recent alumni are currently involved:**

- Jonathan Erpenbach - Surgeon and Pilot for the United States Navy
- Roshitha Dunstan - Biomedical Engineering
- Parker Niemann - Physician in the Air Force
- Caitlin Trombly - Graduate Engineering Studies at Carnegie Melon
- Matthew Sega - Pharmacy
- Alina Lowden - Materials Engineering Studies at The University of Tennessee