



LOUISVILLE REGIONAL SCIENCE FAIRS, Inc.

ouisville Regional Science Fairs News Update: Spring 2009

Janine R. Mura, Newsletter Editor

Visit LRSF on the Web at www.LRSF.org

Congratulations to all of our winners and project entrants!

- **Louisville Regional Science Fairs – March 14, 2009**
- **Kentucky Science and Engineering Fair – April 4, 2009**
- **60th Annual Intel International Science and Engineering Fair
Reno, Nevada – May 10-15, 2009**

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Message from the Fair Director

We thank everyone who was a part of the 45th annual LRSF. It turned out to be another great event. It's not too early to mark your calendar for our 46th, tentatively scheduled for March 13, 2010.

A hearty congratulation goes to all student winners of the various awards. Our Grand Award winners are listed on pages 2 and 3. More details are available on our Web site at www.LRSF.org.

This year's fair had 274 students (262 projects) entered. This was growth over last year.

It was obvious that all participating students took their projects very seriously, and demonstrated their knowledge of the scientific process. Great job!

We also thank the teachers. Your encouragement and instruction is vital in encouraging more youngsters to pursue careers in science and technology.

The Kentucky Science and Engineering Fair (KY-SEF) was held April 4 at Eastern Kentucky University. Congratulations to all of our LRSF nominees. You are all winners! Grand Awards won by LRSF entrants are listed on page 4.

On page 5 you will find some suggestions to P.R.E.P.A.R.E. for 2010. The key is to start the process early, and review required documentation and pre-approvals. If you'd like coaching, please contact me and we can arrange to be of help. As a reminder, "Pre-Approval" means getting the approval **BEFORE** starting the project testing.

Best wishes to all for a great summer,

Joel Gittelson

(502) 454-4457

**Are you considering entering LRSF for the first time in 2010?
See page 5 for some hints on how to P.R.E.P.A.R.E.**

2009 LRSF Senior Division Winners

The following **eight (8) students**** and their projects will represent the Louisville region in the **Intel International Science and Engineering Fair (ISEF)** in Reno, Nevada, May 10-15, 2009. The top two finishers in each LRSF category also were nominated to compete at the Kentucky Science and Engineering Fair.

	Best of Fair, LRSF, Life Sciences	Best of Fair, LRSF, Physical Sciences	Best of Fair, LRSF, Team Projects
1ST PLACE (ISEF Finalist)	Christine Hoyle** , Ballard High School, "Screening For Novel Drugs to Prevent Lung Inflammation"	John Bolander** , St. Xavier High School, "Applying Knife Edge Detection to Turbulence Detection"	Allison Dixon** and Ashley Fields** , Ballard High School, "Better Than Expected: an environmental study of the Biology Pond"
2ND PLACE (ISEF Finalist)	Amy Bischoff** , Ballard High School, "Effect of Sugar Compared to Artificial Sweetener on Bacterial Growth in Food"	Christine Gilbert-Crawford** , Ballard High School, "Tennis Technology"	Hannah Maddox** and Megan Seldon** , Ballard High School, "Red Eye: Exposed!"
3RD PLACE	Akash Gupta , St. Xavier High School, "Can Video Games Improve Attention in Children with ADHD?"	Brittany Hill , Ballard High School, "Does Weather Affect Tuning / Pitch on a Tenor Saxophone?"	N/A

GRAND AWARD WINNERS (FIRST PLACE) BY CATEGORY

ANIMAL SCIENCES	Rachel Cox	Ballard High School
BEHAVIORAL AND SOCIAL SCIENCES	Akash Gupta	St. Xavier High School
BIOCHEMISTRY	Christine Hoyle	Ballard High School
CELLULAR & MOLECULAR BIOLOGY	Jon Hoying	Ballard High School
CHEMISTRY	Mitchell Purvis	Christian Academy
COMPUTER SCIENCE	Harry Ghooray	Ballard High School
EARTH & PLANETARY SCIENCE	Sanjana Thota	Ballard High School
ENERGY & TRANSPORTATION	Jacob Jury	Ballard High School
ENGINEERING - ELECTRICAL & MECHANICAL	Megan Mercer	Ballard High School
ENGINEERING - MATERIALS & BIOENGINEERING	Christine Gilbert-Crawford	Ballard High School
ENVIRONMENTAL MANAGEMENT	Judith Goodman	Ballard High School
ENVIRONMENTAL SCIENCES	Phoenix Skye	Ballard High School
MATHEMATICAL SCIENCES	Allison Hebert	Ballard High School
MEDICINE & HEALTH SCIENCES	Alex Passamonte	Ballard High School
MICROBIOLOGY	Amy Bischoff	Ballard High School
PHYSICS & ASTRONOMY	Connor Murphy	Ballard High School
PLANT SCIENCES	Robert Gardner	Ballard High School

For an expanded listing of category winners with the names of their projects, please visit the home page of www.LRSF.org, or click [here](#).

2009 LRSF Junior Division Winners

	Best of Fair, LRSF, Life Sciences	Best of Fair, LRSF, Physical Sciences	Best of Fair, LRSF, Team Projects
1ST PLACE	Vivek Raj , Meyzeek Middle School, "Sequence Alignment of SHOX gene using Java: How do humans correlate with other animals?"	Erik Rosenstrom , Barret Traditional Middle School, "Blown Away By Wind Power"	Serena Lian and Robin Zhao , Meyzeek Middle School, "Measuring the Volume of Water-Soluble Substances"
2ND PLACE	Noah Hughes , Meyzeek Middle School, "Do Distractions Affect Brain Proficiency?"	Teddy Kamer , St. Francis of Assisi School, "Light Wavelengths' Influence on Performance of Photovoltaic Cells"	Zoe Brooks-Jeffiers and Danielle Beard , Spencer County Middle School, "Go Solar and Save"
3RD PLACE	Sam Reisert , St. Francis of Assisi School, "Camellia Sinensis"	Mahati Vavilala , Meyzeek Middle School, "Galvanic Corrosion of Metals"	Ana Cervera and Holly Gravenkemper , Barret Traditional Middle School, "Anolly's Ovens: Efficiency of Solar Powered Ovens"

GRAND AWARD WINNERS (FIRST PLACE) BY CATEGORY

ANIMAL SCIENCES	Anna Lawson	St. Francis of Assisi
BEHAVIORAL AND SOCIAL SCIENCES	Noah Hughes	Meyzeek Middle School
BIOCHEMISTRY	Vivek Raj	Meyzeek Middle School
CELLULAR & MOLECULAR BIOLOGY	Sam Reisert	St. Francis of Assisi
CHEMISTRY	Joanna Tarullo	St. Francis of Assisi
COMPUTER SCIENCE	Sammy Moorin	Meyzeek Middle School
EARTH & PLANETARY SCIENCE	Phillip An	Meyzeek Middle School
ENERGY & TRANSPORTATION	Allison Artman	North Oldham Middle
ENGINEERING - ELECTRICAL & MECHANICAL	Erik Rosenstrom	Barret Traditional Middle
ENGINEERING - MATERIALS & BIOENGINEERING	Mahati Vavilala	Meyzeek Middle School
ENVIRONMENTAL MANAGEMENT	Cooper Whaley	St. Francis of Assisi
ENVIRONMENTAL SCIENCES	Aimee Turner	Meyzeek Middle School
MATHEMATICAL SCIENCES	Breck Stodghill	Meyzeek Middle School
MEDICINE & HEALTH SCIENCES	Catherine O'Connor	St. Francis of Assisi
MICROBIOLOGY	Kaitlin LaBarbera	St. Francis of Assisi
PHYSICS & ASTRONOMY	Teddy Kamer	St. Francis of Assisi
PLANT SCIENCES	Ben Logsdon	St. Francis of Assisi

For an expanded listing of category winners with the names of their projects, please visit the home page of www.LRSF.org, or click [here](#).

**2009 LRSF Student Accomplishments at
Kentucky Science & Engineering Fair**

The top two finishers in each LRSF category were nominated to compete at the **Kentucky Science and Engineering Fair** held April 4. Students who won Grand Awards are listed below. Congratulations to all!

Senior Division, KY-SEF			
Student	Category	Place	School
Sanjana Thota	BEST OF FAIR, PHYSICAL SCIENCES	3rd	Ballard High School
Mitchell Purvis	Chemistry	2nd	Christian Academy
Sanjana Thota	Earth Science	1st	Ballard High School
Megan Mercer	Engineering – Electrical & Mechanical	1st	Ballard High School
John Bolander	Physics & Astronomy	2nd	St. Xavier High School
Kevin Brand	Plant Science	2nd	Ballard High School

Junior Division, KY-SEF			
Student	Category	Place	School
Kristopher Thieneman	BEST OF FAIR, LIFE SCIENCES	1st	St. Francis of Assisi
Serena Lian and Robin Zhao	BEST OF FAIR, TEAM PROJECTS	1st	Meyzeek Middle School
Zoe Brooks-Jeffiers and Danielle Beard	BEST OF FAIR, TEAM PROJECTS	2nd	Spencer County Middle
Meg Olash	Behavioral & Social Sciences	2nd	St. Francis of Assisi
Tasneem Karim	Biochemistry	1st	Newburg Middle School
Vivek Raj	Biochemistry	2nd	Meyzeek Middle School
Caleb Bridgwater	Cellular & Molecular Biology	1st	Meyzeek Middle School
Sam Reisert	Cellular & Molecular Biology	2nd	St. Francis of Assisi
Mitali Chitre	Computer Science	1st	Meyzeek Middle School
Sammy Moorin	Computer Science	2nd	Meyzeek Middle School
Will Ostertag	Earth Science	2nd	St. Francis of Assisi
Sarah Asseff	Energy & Transportation	2nd	Newburg Middle School
Mahati Vavilala	Engineering	1st	Meyzeek Middle School
Joshua Borden	Engineering	2nd	St. Francis of Assisi
Aimee Turner	Environmental Science	2nd	Meyzeek Middle School
George Anderson	Mathematical Science	2nd	Meyzeek Middle School
Shilpa Subramanian	Microbiology	2nd	Meyzeek Middle School
Kristopher Thieneman	Plant Science	1st	St. Francis of Assisi

LRSF Thanks Our Generous 2009 Sponsors

- **“Supernova” Sponsors** (\$5,000+): E.ON US, Metropolitan Sewer District, Ventas.
- **“Catalyst” Sponsors** (\$1,000 to 2,499): Kentucky’s Touchstone Energy Cooperatives, Kentucky Science Fair Endowment, Kiwanis International (Division 12), Mallinckrodt Baker Inc., Norton Healthcare, Peptides International, Society of American Military Engineers (Kentuckiana Post), Superior Distributing, Zeon Chemical.
- **“Eureka” Sponsors** (\$500 to \$999): Akzo Nobel, Allstate Foundation, New Directions Unlimited, Labsco, Science Applications International Corp., Al & Betty Younger.
- **“Friends of LRSF”** (\$250 to \$499): Papa John’s International.
- **“In-Kind” Donors:** The Bakery, C. Lee Cook (A Dover Company), Dairy Queen Corporate Stores, Crowne Plaza - Airport, Jefferson Community & Technical College, Krispy Kreme Donut Company, Minuteman Press Downtown, Republic Bank, Silicon River Geo Designs, Strand Associates Inc., University of Louisville.

New Teachers: P.R.E.P.A.R.E. for the 2010 LRSF

Are you considering entering student projects in the 2010 LRSF? Have you thought about it in the past, but had concerns that the entry process would be difficult or involve too much paperwork?

The LRSF has drawn a consistently strong field of projects each year from several of the excellent schools in our Kentucky region. **We welcome all schools who would like to be a part of this experience.** There are plenty of awards and learning experiences to go around!

In 2008, five (5) schools participated in the LRSF for the first time, plus one who had joined LRSF in 2007 with only a single project entry. Students from these “newcomer” schools earned these awards at LRSF:

- A First Place Best of Fair
- Three (3) Second Place category awards
- Two (2) Third Place category awards
- Two of these schools also tied for 3rd Place in the Overall School Awards for their division.

Plan now to join our event in March 2010! Here are some ideas to help you **P.R.E.P.A.R.E.:**

Project Selection. Some projects, such as those involving microorganisms, animals, tissues, human subjects, or hazardous materials, often require more forms, more adult project supervision, and more work to be done in regulated research facilities supervised by a qualified scientist. Simpler may be better.

Rules Wizard. This online guide at www.societyforscience.org/isef/students/wizard/index.asp walks you through questions about a student’s proposed project, then tells you what forms and approvals you will need before beginning work on that project. You’ll print the output to include in the LRSF application packet.

Early Start. Begin considering project ideas and science fair logistics during summer or early fall – especially if you are planning a school science fair – so there is time to complete forms, obtain any pre-approvals, and make plans. Typically the LRSF application deadline is in early February.

Plan the Research. The Research Plan is the first document to be created and approved, before starting any project work. It’s straightforward, consisting of: 1) the question being addressed, 2) hypothesis, problem, or engineering goals, 3) detailed description of procedures and data analysis, and 4) bibliography.

Approvals. Several LRSF forms, plus a Teacher Tally sheet, and ISEF forms are the basics for all projects. The Rules Wizard will list other approval forms if a project needs additional scientific review (see “Project Selection” above). See www.LRSF.org for details, since updates may be made as the summer progresses.

Important: Obtain any required pre-approvals before the project work begins.

Resources. Mr. Joel Gittelson, LRSF Fair Director, is available to answer any questions you may have. Visit www.LRSF.org throughout the school year for forms, information, and links to useful Web sites.

Embark on the Project. Employ the scientific method, Enlighten the students, and Everyone Enjoy the scientific inquiry process!

Watch for our Fall 2009 Newsletter issue for more details!