PAPER CUP CHALLENGE (Grades 6-8) Redesign the classic paper cup. Use no tape, glue nor staples. You are seeking a proto-type for a cup that will lower production and product costs. Learn scientific principles, constraints of design. Implement and evaluate solutions. The lowly paper cup is needing your attention and creativity. Your help is on the way!!	
DESIGN SQUADS BUILD ROBOT ARMS  (Grades 6-8)  A Laureate challenge! Design and build a robotic arm that can lift a cup off the table. But wait- build a two section arm and on to a third section! NASA sends spacecraft equipped with robotic arms to explore places humans can't visit, like Mars and asteroids. Fun, too! Kick the cup game, pick up a target cup, play round robinTest, evaluate and redesign.	
SOFT LANDING (Grades 6-8) Design and build an airbag system that can safely land an egg dropped onto the floor. Spacecraft, cars and packages use airbags. Makes a great cushion! Three rovers have landed safely on Mars using an airbag system. Create a Laureate airbag landing system. Engineering all the way!!	
LAUNCH IT (Grades 6-8) Going to the moon? You'll need a rocket. The rockets NASA sends to the moon go up to 18,000 miles per hour. But it takes about three days to get there. So, sit back, and enjoy the view! Now - YOUR TASK! Design and build an air-powered rocket that can hit a distant rocket.	
UP AND AWAY (Grades 6-8) Your task is to design and build devices to protect and accurately deliver dropped eggs. Devices represent care packages that must be delivered to people in a disaster area with no road access. An egg represents perishable supplies.  Delivering life-sustaining supplies is an unpredictable realworld challenge. Supplies may be dropped from a plane or delivered by truck. Cushion the impact of your supplies.  Help those in need!!	Total Fee
YESTERDAY'S TRASH = TODAY'S ROBOTS  (Grades 6-8)  Think twice before discarding that 1985 CD-ROM, don't throw away that aluminum can, and find that plastic bottle under the couch!! State-of-the-art session, eco-friendly while stretching your imagination as well as taking part in the joy of recycling. These "bots" are powered by sunlight. Hands-on; solar topics.  (Lab Fee \$15)	

# Have you attended previous Summer Laureate Sessions? Parent(s) Name Student Name Enrolled in a gifted/talented program? atest group or individual intelligence test: in school (number your choices PLEASE USE THIS FORM FOR EACH NOMINATION (PLEASE 8 Other, What? Achievement Test Scores in order of preference) Postion/Title Phone School System Application Fee OFFICE USE ONLY Grade Science Level (September 15) Math Ζįρ

#### Laureate Mechanics

- Only a limited number of students can be accepted into and accommodated in the Summer Laureate.
- The Laureate will be held from 9:00 am to 3:30pm daily (excluding Fridays)
- Students will meet in the Kennedy Union Ballroom, second floor, at the beginning of each day.
- Students who are selected for Laureate will be sent further details.
   On opening day, an orientation meeting with class schedules will be held on campus for parents and students.
- -All Laureate participants and their parents automatically grant permission for use of student activities, such as picture taking, movies, video or audio taping. Permission is also granted for planned field trips. It will be necessary to have medical forms on file and your own medical insurance.
- Transportation to and from the campus will be provided by the parent.
- -Lunch and snacks will be served in the Kennedy Union. A non-refundable \$95 application fee is necessary. (If student is not accepted, application fee will be refunded.) The remaining balance of \$200 must be paid by June 5, 2015.
- Make checks payable to:

Lelia C. Boyd, Ph.D Director - Summer Laureate 538 Hopper Hill Farms Road Cincinnati, Ohio 45255

(Personal checks for registration fees will be processed after the notification of screening status.)

- •Fees are non-refundable for cancellations after June 12, 2015.
- \*The deadline for nominations is May 1, 2015.
- -After deadline, please call for possible openings, (513) 753-9143.

Phone: (513) 753-9143

Lelia C. Boyd, Ph.D. 538 Hopper Hill Farms Roz Cincinnati, Ohio 45255

# 

for Promising Young Scholars



Wisdom lies not in knowledge
- which quickly becomes outdated- but in perpetually
seeking it.
-Socrates

2015

University of Dayton Kennedy Union

# Summer Laureate 2015 • June 29 through July 3

## At the University of Dayton Kennedy Union

### Laureate 2015 - A Perspective

Welcome Summer!

"Sweet youthful days, that were as long as twenty days are now." - William Wordsworth

The Summer Laureate -A unique summer program...

high academic achievers in grades three ...where through eight have the opportunity to expand their knowledge within a university setting. ...where dedication to the pursuit of learning are

reflected in the staff, students and program offerings.

...where there exists a challenging education plan that blends academic, cultural, social and recreational components into a rich and natural environment.

...where a staff is selected for their high level of preparation in their disciplines, outstanding teaching abilities and enthusiasm for working with bright students.

#### To Our Students

Midday activities bring the "Laureate family" together for quest speakers discussion topics and cultural presentations.

The cost for the one-week program is \$295. This includes all activities, instructional materials (except assigned lab fees), recreation, noon meal and snacks, plus the Sundae Social on Friday afternoon. Details will be given at orientation on June 29, 2015.

#### Selection

Laureate is designed specifically for high academic achievers who meet the following criteria:

-enrolled in a gifted/talented program in their respective OR school

-superior achievement in an academic program -students entering third through eighth grade in September, 2015.

Final selection is dependent upon the Laureate screening after all data is considered. Those who are selected will be notified by May 8, 2015,

#### You're Invited

Back by popular demand! The Sundae Social on Friday afternoon at 2:30 pm in the Kennedy Union Ballroom. A happy ending to a fun-filled week. Invite your family members to join us!

For More Information Contact: Lelia C. Bovd. Ph. D. (513) 753-9143 Please leave a message.

## **Workshop Descriptions**

Choose SIX of the workshop sessions which interest you. Number your choices in order of preference (1,2,3, etc.) in the boxes provided by each workshop you select. There is a maximum capacity attendance for each of the workshops so be sure to register as soon as possible. We will make every effort to provide three workshops of your choice. A workshop may be canceled if there is insufficient enrollment.

Because young minds matter

#### Grades 3-5

		2	DAYTON DAILY NEWS HEADLINES
	FIND THE PHUN IN SCIENCE (Grades 3-5) All kinds of explorations!! Explore, inquire, test, analyze, conclude, wonder, synthesize and discover how science works. Through the years, Laureates have shown an interest and enthusiasm for the hands-on, minds on scientific challenges. Join the scientific blogosphere era!!		B.B Wolf indicted- FINALLY! You know what he did! Public opinion found him guilty of destroying the residence of those little pigs. Demonstrates princi- ples of American life. This criminal trial simulation may shed doubts on his previous conviction. Was he really guilty of destroying their house? Could he
The second secon	POTATO POWER (Grades 3-5) The lovable potato can light an LED clock (or light bulb)!! Learn how a battery works in a simple circuit, and how chemical energy changes to electrical energy. Amazing! Along with this, learning of voltage, current and resistance. Connect 2 potatoes! Can we get electrical energy from a	decide! A great learning experience with lots est and enthusiasm! (Grade 3-5)	circumstantial evidence? We shall see! Let the court decide! A great learning experience with lots of inter-
	fruit or vegetable? (I never saw a potato I did not like even Mr. Potato Head!) Wow! What a session!		ROBOTS Some like it hot like the T4! This solar robot is powered
	EARTHQUAKES AT THE LAUREATE WEEK (Grades 3-5) The earth does rumble! As an engineer, you will build your own structure to withstand damage. Build out of toothpicks and marshmallows. Test how earthquake-proof your building is by stimulating an earthquake in a pan of Jell-O. Test it, and then redesign the structure based on its performance. A very scientific process! Since your project was so good,		by the sun! No batteries needed! Transforms into 4 different modes: Robot. Insecta, and Drill Vehicles. Robotics engineering combines science, math- AND fun!! Solar and robotic topics. (Grades 3-5)
	make a pitch to a company to convince them to let you design a better building or structure for them. So challenging and an appropriate problem solving session!		Grades 6-8
	CRE-EGG-TIVITY (Grades 3-5) Extraordinary learning "eggsperiences" with this session. Be prepared for (eggs)citing group interaction in logic, problem solving and the image of science using the incredible egg. Floating egg, rising egg, walking on eggs Amazing what you can learn	a a n y	SNACK ATTACK (Grades 6-8) calling top-rated engineer designers! We need you! Design and test products that can protect a package from heat and anoisture. Manufacturers and food stores will be grateful in our solutions of these problems. Your packages may be on croger's shelves in the future!! We are not kidding!!
	TOOTHPICK BRIDGES (Grades 3-5) How did the chicken cross the road? If it were smart, it built a bridge! That's what this session does!!! Integrate math, science and technology. One of the most popular engineering activities is the bridge design and construction. Strive to build a bridge to support as possible!	b th R	COBOT BASKETBALL (Grades 6-8) ccuracy and precision needed! Your challenge: Design and uild a "robot" basketball player who can nail three free-trows in a row. The Bots are the best team in the World obotics Basketball League, and they are looking for the est free-throw players they can find. Tryouts are this week.
	HARMLESS HOLDER (Grades 3-5) Invent a holder for 6 cans that's animal-safe, sturdy, convenient and easy to carry. Protect our animal friends from discarded plastic rings. Build, test, redesign. They will love you! Great Teamwork.	so L	he most accurate players will get the job. Does this ever bund exciting!! Who will be the best players???  EANING TOWER OF PASTA (Grades 6-8) ension and compression are 2 forces engineers consider.
	FAIRY TALES ON TRIALS (Grades 3-5) Observe a fine line between "doing wrong" and "crime". Character education, critical thinking, lots of problem solving, and teaches our actual legal system. Act as lawyers, judges, witnesses or defendants in court cases. Join us in this session! You will like it!! Who knows this session might just open a career field in our future!!	La de of pro ha	r in designing a building as well as the materials used. aureates are turning to spaghetti and marshmallows to etermine which ones will handle the greatest load. Each f these have strengths and weaknesses in the design rocesses. Decisions will be left to your findings. You ave work to do!! Let us know the results! We are count- ng on you!!

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