



## Tentative Program

### Student Workshop Schedule

Time	Event
8:30 - 9:00	Registration open for check-in (light breakfast provided)
9:00 - 10:00	<b>Keynote Speaker: Katherine Kelly, Disney Engineering</b>
10:00 - 11:00	<b>Workshop 1</b>
11:00 - 12:00	<b>Workshop 2</b>
12:00 - 12:30	Lunch (provided)
12:30 - 1:30	<b>Workshop 3</b>
1:30 - 2:30	<b>Workshop 4</b>
2:30 - 3:00	Closing Ceremony

### *About our Keynote Speaker*

**Katherine “Katie” Kelly** is a senior mechanical engineer at Walt Disney World. Originally from California, she took an interest in engineering after a visit to Disneyland in high school. After graduation, she moved to Florida and enrolled in the University of Central Florida's mechanical engineering program with the dream of someday working at Walt Disney World. After her freshman year in college, she was awarded an internship as a test engineer at WDW. Her work included testing and opening attractions such as Mission Space and Expedition Everest. Katie graduated magna cum laude from UCF and was promptly hired on full time by Disney.

After a year, she transferred into the Global Applied Technology group, which focuses on designing and implementing new technologies into the parks worldwide. She passed the state professional engineering exam and is licensed as a PE in both Florida and California. Recently, Katie was awarded a patent for a safety component which she designed for the Big Thunder Mountain attraction in Disneyland Paris. Currently, she lives in Windermere with her husband, two children, and also owns two Firehouse Subs restaurants.

At our conference, she'll be talking about what STEM means, different STEM careers, and her own path to her career as a mechanical engineer at Disney. Audiences will get to watch demonstrations related to her work in engineering.



## ***Student Workshop Descriptions – Participants assigned to four of these***

### **My Six-Word Story – Animating and Sharing with Scratch**

Everyone has a story to tell, and in this interactive workshop, participants get a chance to do that in a new way. Using Scratch, a fun programming environment, they will create an animated story and learn how to share their stories with others. They'll learn the basics of Scratch so they can continue 'creative computing' at home and explore more fun possibilities for making interactive stories, games, art and other creative works.

### **Optics Expo**

In this expo, participants rotate through stations that explore topics in optics and optical engineering. They will explore why common place objects look dramatically different with an infrared (IR) camera and observe how our body reacts to hot and cold temperatures. They will learn how autonomous robots work, how lasers can be modulated to carry information such as music, and manipulate light using tasty lenses made out of Jello!

### **Polymers are Fun!**

Participants find out how much fun it is to work with polymers, a common engineering material. They'll discover how polymers are formed, their specific properties, and what it is like to work in Research & Development jobs.

### **Squishy Circuits**

Electricity may seem mystifying but it's everywhere! We don't need a complex machine to harness it; even the most mundane things can be electrical! Participants will use homemade play dough to make their own components and circuits.

### **Designing a skyscraper**

With a few household materials, participants will compete in a civil engineering challenge to create a skyscraper that supports a giant bouncy ball. This is a fun and challenging activity that integrates science concepts such as center of gravity, weight distribution, strength of materials, and engineering processes to solve problems.

### **Watching Your Eye Health – A Vision Care Workshop**

This workshop provides a stimulating and interactive program covering a range of topics related to the eye and vision care. Participants will learn about the structure and function of the normal eye, and gain knowledge of the effects of various eye conditions and eye diseases on vision performance through demonstrations and hands-on activities.



## Parent Workshop Schedule

Time	Event
8:30 – 9:00	Registration open for check-in (light breakfast provided)
9:00-10:00	<b>Dr. Diana - Hands on STEM workshop</b>
10:00-11:00	<b>Yassi Myers – “WE” Power, Women in Engineering</b>
11:00 – 12:00	<b>Visit with Katherine Kelly, Disney Engineer</b>
12:00 – 1:30	Lunch (provided) & Speaker <b>Amy Grunewald – High School Planning and Financial Aid</b>
1:30 – 2:30	<b>Dr. Betty Bennett – 0 Bullies : 4 Me!!</b>
2:30 – 3:00	Closing Ceremony

### Parent Workshops and Activities Descriptions

#### Dr. Diana - Hands on STEM workshop

Dr. Diana Wehrell-Grabowski, a.k.a. Dr. Diana is a nationally-recognized science education consultant. Diana is known for her effective and innovating teaching style, as well as being able to captivate, motivate, and inspire participants during her presentations. She has been at the forefront of science education for over 28 years as a full-time classroom teacher, professional staff development instructor, conference presenter, keynote speaker, and university professor. Diana has a PhD in Science Education from Florida Institute of Technology, as well as a M.Ed. in Curriculum and Instruction in the area of Science.

Dr. Diana established her educational consulting business, Mobile Science Education Consulting Services in 1987. She travels the country conducting interactive keynote presentations, teacher training workshops, seminars, teaching institutes, family science workshops, and hands-on science programs for students.

During her one hour presentation with us, she will focus on getting the parents excited about STEM concepts and helping them continue their involvement with their daughter's education. For those parents who attended the conference last year, rest assured that Dr. Diana will present new and exciting material. More information about Dr. Diana can be found [on her website](#):

#### Yassi Myers, PE, President, TLP Engineering Consultants, Inc. – “WE” Power

Serving 29 years in the engineering profession, Ms. Myers has managed high profile transportation projects providing vital links for Central Florida transportation. These projects have



included every major interstate and expressway throughout the region such as I-4, SR 417, I-75, SR 528 and I-95. Her passion and dedication to the engineering profession has earned her respect in the engineering community and earned her numerous awards such as the Florida Engineering Society (FES) state "Engineer of the Year 2008", Central Florida Engineering Week's "Leadership Excellence 2005", FES Central Florida chapter "Engineer of the Year 2008" and American Society of Highway Engineers (ASHE) "Engineer of the Year 2001".

Ms. Myers has been involved with numerous community projects and has served on a number of boards and committees including Orange County Development Advisory Board, Orange County Transportation Liaison Committee and UCF Transportation Steering Committee. She served as the State President for the Florida Engineering Society and co-chaired the Florida Engineering Leadership Institute. A graduate of Louisiana State University (2003 and 2007 National Football Champions), she holds a BS in civil engineering and is a licensed professional engineer in Florida.

Ms. Myers will provide a national and state perspective on the number of graduates in engineering and why so few women pursue a career in the STEM related fields. She will discuss recommendations from recent studies that we all, as parents, educators and industry leaders, can use and implement as we interact with young women.

### **Visit with Katherine Kelly, Disney Engineer**

After she kicks off the conference for the girls, Katherine Kelly, Senior Mechanical Engineering at Walt Disney World will visit with adult workshop participants. She'll tell her personal story about pursuing a STEM career and the path that led to working at Disney. Read more about Ms. Kelly in the keynote section of this program.

### **Amy Grunewald – High School Planning and Financial Aid**

Ms. Amy Grunewald has a B.A. degree in Psychology and a M.Ed. degree in Counselor Education from the University of North Florida. She is a school counselor at Yulee High School in Yulee, Florida and has been a school counselor in Duval and Nassau Counties for 14 years.

One of the most important roles of the school counselor is to assist students in being college ready. Topics in this presentation will include college preparedness, financial aid, searching for the right college for your child and using online resources. Ms. Grunewald will give a presentation applicable to all school districts on important things to consider when planning for the high school and college years.

### **Dr. Betty Bennett – 0 Bullies : 4 Me!!**

Dr. Betty Bennett is an Assistant Professor in UNF's Department of Leadership, School Counseling & Sport Management and Director of the Educator Preparation Institute. Her research interests include school leadership, discipline, character/moral education, and bullying. Prior to earning her doctorate in Educational Leadership at Florida State University, she was employed at the



Saturday, February 11, 2012, 9:00am-3:00pm

public elementary, middle, and high school levels in the roles of teacher, administrator, and district level staff. She has written two books on school discipline, is a certified martial arts instructor, and through this venue teaches anti-bullying to children and women's self-defense. Her passion is creating safe learning environments for all students.

The purpose of this workshop is to bring about awareness of the growing problem of bullying and violence in our schools and society. Dr. Bennett will provide information as to how parents, educators, and yes, even children can be part of prevention and intervention through education.



## Directions to the UNF University Center

UNF University Center  
12000 Alumni Drive  
Jacksonville, FL 32224

### From I-95:

- Exit East on J. Turner Butler Blvd.(Exit 344)
- Go approximately seven miles to the Kernan Blvd. exit
- Exit and turn left onto Kernan Blvd.
- Turn left onto Alumni Dr.
- Turn left at the first light (Holzendorf Dr.)
- Take first left into University Center parking lot

### From Beach Blvd.:

- From Beach Blvd. head South on Kernan Blvd.
- Turn right onto Alumni Dr.
- Turn left at the first light (Holzendorf Dr.)
- Take first left into University Center parking lot

### From the Beaches:

- Go West on J. Turner Butler Blvd. to the Kernan Blvd. exit
- Exit and turn right onto Kernan Blvd.
- Turn left onto Alumni Dr.
- Turn left at the first light (Holzendorf Dr.)
- Take first left into University Center parking lot

### From State road 9a:

- Exit at UNF Dr.
- Head East onto UNF Dr.
- Make right at the first traffic light
- Make a right at the next traffic light onto Alumni Dr.
- Turn right onto Holzendorf Dr.
- Take first left into University Center parking lot

For a detailed map, visit

[http://www.unf.edu/anf/universitycenter/Map\\_and\\_Directions.aspx](http://www.unf.edu/anf/universitycenter/Map_and_Directions.aspx).