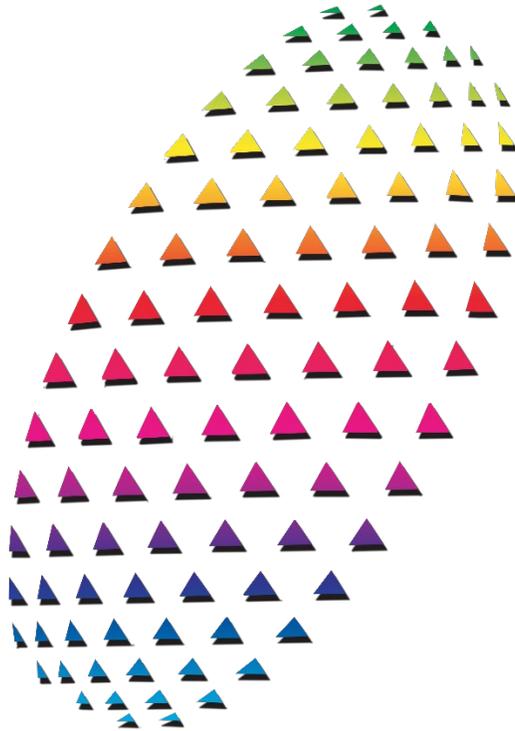




CREOL, The College of Optics and Photonics

UNIVERSITY OF CENTRAL FLORIDA



PARTNERSHIP PROSPECTUS

Teacher Ambassador Program

June 2026

<https://creol.ucf.edu/ambassadors/>

Teacher Ambassador Program 2026

June 2026

Hosted by CREOL, The College of Optics and Photonics

SPONSORSHIP OPPORTUNITIES

Teachers are an important resource for students to learn about careers in optics and photonics.

Given the tremendous demand from industry and the lack of awareness of photonics among teachers and students, we are hosting what we expect to become a multi-year professional development program that includes an initial three-day ambassador summer camp at CREOL, The College of Optics and Photonics (CREOL), two additional workshops during the academic school year and proposing a year-two program/site visit to Lawrence Livermore National Laboratory's National Ignition Facility (NIF). The goal is to build a network of sustained teachers who will act as ambassadors and educate their students about a career in photonics. Teachers will be given a set of materials and lesson plans they can use with their students.

We know from previous NSF Funded Research Experiences for Teachers, that highly engaged teachers will bring lessons back to their classrooms and they can inspire students to explore career opportunities that they otherwise would not have known about.

One study out of the United Kingdom demonstrated higher earning potential when teachers were aware of careers and purposefully discussed the careers with students. The report also concludes that the best earnings occurred when students were partnered with an employer meeting.

Another report from the Northwest Association for Biomedical Research suggested that teachers should be supported with professional development in career guidance and build a network of educational institutions so students can explore career opportunities. They suggest that professional development should include project-based lessons, career focused curricula, and guest speakers from industry.

SUMMER CAMP STRUCTURE

Selection: In Year One, Teachers from Orange, Osceola, Seminole and Brevard Counties, in Central Florida will apply in a competitive process for one of 10 ambassador positions. They will need to demonstrate that they have support from their high school administration to attend the program, a commitment that they will teach in the upcoming academic year (2026-2027) and conduct the lessons taught during the workshops as well as additional information about their relevant teaching experiences. In each successful year, an additional 10 teachers will be selected, to grow to a total group of 50 ambassador teachers who complete P-TAP.

Structure: Teachers will attend a three-day summer camp, taught by two Orange County Science Teachers, who have previously taught our high school Laser and Photonics Camp. Topics of the Year One Ambassador Program include:

- Electronics and Light: The Field Of Photonics
- Build a Telescope: The Basics of Optics, Light, Waves, and Image Formation
- Laser Safety
- Spectral Analysis and how it is used from measuring pollution to solving crimes.
- Free Space Optical Communication: Fiber Optics without the Fiber
- Accessible Optics: Advanced Optics with Printed Materials
- Interferometry: From the Micro to the Macro
- Learning about careers and education in photonics
- Lab Tours
- Industry Applications
- Career Panel hosted by National Ignition Facility
- Research Talks

Teachers will attend the program June 10-12, 2026, 9 am to 4 pm.



Activity at a CREOL Workshop

SPONSOR OPPORTUNITIES AT A GLANCE

SPONSOR LEVELS		PROGRAM & WEBSITE	PROGRAM		LESSON PLANS		GIVE-A-WAYS	SIGNAGE
			LOGO	LISTING	LOGO	LISTING		
PRESENTING SPONSOR (1)	\$40,000	✓	✓		✓		✓	✓
TEACHER SPONSORS	\$2,500	✓	✓			✓		✓
LESSON SPONSOR – SINGLE	\$1,000	✓						✓
LESSON SPONSOR - ALL	\$10,000	✓	✓		✓			✓
PROGRAM AD ¼ PAGE	\$250	✓	✓					✓
PROGRAM AD ½ PAGE	\$400	✓	✓					✓
PROGRAM AD FULL PAGE	\$750	✓	✓					✓

SPONSOR LEVEL INFORMATION

PRESENTING SPONSOR (1 OPPORTUNITY):

As a Presenting Sponsor, your company will have top billing. This will support the stipends for 10 teachers, coverage for substitute teachers, and supplies for teachers to use in their classrooms. You will be listed on our website and in the program teachers receive, along with your logo in the lesson plans provided to teachers, and any promotional material you would like to provide to them as give-a-ways.

Sponsor Level: \$40,000

BENEFITS

- ✓ PROGRAM & WEBSITE
- ✓ LOGO IN PROGRAM
- ✓ LESSON PLANS
- ✓ GIVE-A-WAYS
- ✓ SIGNAGE

TEACHER SPONSOR (10 OPPORTUNITIES):

As a Teacher Sponsor, your company will sponsor a single teacher that includes their stipend and funding for the supplies for their classroom. You will also be listed on the website, in the program and on signage we have for the program. You will be listed in the lesson plans as a sponsor.

Sponsor Level: \$2500

BENEFITS

- ✓ PROGRAM & WEBSITE
- ✓ LOGO IN PROGRAM
- ✓ LISTED IN LESSON PLANS
- ✓ SIGNAGE

LESSON SPONSOR (6 OPPORTUNITIES)

Teachers will be provided with the materials they need to successfully conduct lesson plans and activities with their students. Some examples of materials they are provided include Spectral Emission Tubes and Power Supply, Diffraction Gratings, 3-D Printed Telescopes, Lasers for Interferometry, and Kits for Free Space Optical Communication. Sponsor either a single kit or all.

Sponsor Levels: \$1000 (Single) | \$10,000 (All)

BENEFITS (SINGLE)

- ✔ PROGRAM & WEBSITE
- ✔ LISTED IN PROGRAM
- ✔ LISTED IN LESSON PLANS
- ✔ SIGNAGE

BENEFITS + (ALL)

- ✔ LOGO IN PROGRAM
- ✔ LOGO IN LESSON PLANS

ADS IN THE PRINTED PROGRAM AND WEBSITE

Full page – \$750

- 1 page, no specific position in the program
- Regular-size logo on Teacher Ambassador Program website with hyperlink to the company's website

Half page – \$400

- ½ page, no specific position in the program
- Regular-size logo on Teacher Ambassador Program website with hyperlink to the company's website

Quarter Page – \$250

- 1 page, no specific position in the program
- Regular-size logo on Teacher Ambassador Program website with hyperlink to the company's website



Participants at a workshop hosted by CREOL and SPIE.

DESCRIPTION OF ACTIVITIES

Teacher Ambassadors will participate in a three-day workshop in June 2026. They will receive a kit of activities that include all materials, a lesson plan book, and professional development so they can successfully engage students in their classrooms. It is important to note that teachers are required to assess the knowledge of students' understanding of the Florida Standards. These standards are defined at www.cpalms.org and the lessons are designed to be correlated to the high school science standards.

Below is a description of the activities planned for the program:

1. **Electronics and Light: The Field Of Photonics:** Teachers will receive custom printed circuit boards and will receive a set of supplies to build some basic photonic systems like a light sensor to activate an alarm or automatically turn on a lamp. This activity is used to highlight that photonics is the merger of light and electronics in the design of products and devices.
2. **Build a Telescope: The Basics of Optics, Light, Waves, and Image Formation:** We will print custom 4-inch reflecting and 2-in refracting telescope systems that teachers will use to learn about the basics of light; reflection, refraction, diffraction and interference. They will also receive a kit of basic lenses and mirrors that students will use.
3. **Spectral Analysis and how it is used from measuring pollution to solving crimes:** Teachers will learn about the EM Spectrum, how light is used to “fingerprint” materials, and will receive a set of four spectral emission tubes and the power supply for them.
4. **Free Space Optical Communication: Fiber Optics without the Fiber:** Using a basic kit we designed for the Education and Training in Optics and Photonics 2023 conference CREOL hosted, teachers will design a free space optical communication system and learn about the way that information is transferred via light.
5. **Accessible Optics: Advanced Optics with Printed Materials:** Teachers will examine how we can take research-level optical experiments and condense them into a classroom level activity using 3D printed components. Teachers will learn the basics of optical design, alignment in regards to the double-slit experiment and the next item on this list, interferometry.
6. **Interferometry: From the Micro to the Macro.** Teachers will learn how optics can be used to take microscopic movement and display it on a macroscopic scale. They will use the items printed from Accessible Optics for this activity.

Plus:

1. Career Panel with National Ignition Facility Staff
2. Laser Safety Training
3. Hear from Industry Representatives
4. Research Talks from CREOL Faculty
5. CREOL Lab Tours
6. Career Resource Activities

TEACHER AMBASSADOR TEAM



David Hagan, Dean, received his PhD degree in Physics at Heriot-Watt University, Edinburgh, Scotland in 1985. He is a Pegasus Professor and Dean of the College of Optics and Photonics. He was the founding Editor-in-Chief of the journal, Optical Materials Express, and was the Executive Editor-in-Chief of Chinese Optics Letters. His current research interests include techniques for nonlinear optical materials characterization, optical power limiting and switching, and methods for enhancement of optical nonlinearities.



Mike McKee, Associate Director, coordinates the Photonic Science and Engineering program in the College of Optics and Photonics. He was a high school physics teacher with Orange County Public Schools and a science instructional coach in San Francisco and Orlando. He was the national director for two Science Olympiad National Tournaments hosted at UCF as well as the Florida State Director for 20 years. He has hosted many workshops for science teachers and at SPIE and OPTICA conferences.



Bill Young, Instructor, is a dedicated educator with 27 years of experience at OCPS, specializing in science and Project Lead the Way (PLTW). He has hosted teacher workshops with OCPS and STEM Pros, and organized student summer camps at UCF, inspiring future innovators and fostering a passion for STEM education.



Jorge Vallin, Instructor, is a 35-year educator with Orange County Public Schools. He has been a science teacher for more than two decades, and he has earned Project Lead the Way (PLTW) Master Teacher status. He has hosted teacher workshops with the University of Kansas Center for Research on Learning, OCPS, and PLTW. He was invited to present at the Research to Practice Summit hosted by the Department of Education in Washington, D.C.

QUESTIONS ABOUT SPONSORSHIP OPPORTUNITIES?



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