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Optical Science Discovery Program: Pre-College Outreach and So Much More¹

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Recruiting and retaining women into the physical sciences is an ongoing struggle for universities, with the gap between men and women in physics remaining strong. Research shows a precipitous drop in female participation in the physical sciences around the 7th grade year of primary education, where girls begin losing interest during middle school, the drain continuing throughout high school with another significant drop at the bachelors level. To combat the loss of women in the physical sciences, the Oregon Center for Optics at the University of Oregon has created the Optical Science Discovery Program (OSDP), a precollege outreach program that targets girls in middle and high school. This program uses optical sciences as the medium through which girls explore experimental science. The program consists of a one-week intensive summer camp, a mentored monthly science club, summer internships and mentoring opportunities for camp alumni. By utilizing media often at the core of teenage life (e.g. Facebook, MySpace) we also aim to interact with program participants in a familiar and informal environment. Mentoring of OSDP activities is carried out by faculty and students of all levels. This in turn allows other education and outreach efforts at the University of Oregon to incorporate OSDP activities into their own, contributing to our broader university goals of surmounting barriers to higher education and creating a more scientifically literate populace. This talk will describe the OSDP program and its incorporation into the broader spectrum of outreach and education efforts.

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