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Challenges and Opportunities in Interdisciplinary Materials Research Experiences for Undergraduates[1] YOGESH VOHRA, THOMAS NORDLUND, University of Alabama at Birmingham — The University of Alabama at Birmingham (UAB) offer a broad range of interdisciplinary materials research experiences to undergraduate students with diverse backgrounds in physics, chemistry, applied mathematics, and engineering. The research projects offered cover a broad range of topics including high pressure physics, microelectronic materials, nano-materials, laser materials, bioceramics and biopolymers, cell-biomaterials interactions, planetary materials, and computer simulation of materials. The students welcome the opportunity to work with an interdisciplinary team of basic science, engineering, and biomedical faculty but the challenge is in learning the key vocabulary for interdisciplinary collaborations, experimental tools, and working in an independent capacity. The career development workshops dealing with the graduate school application process and the entrepreneurial business activities were found to be most effective. The interdisciplinary university wide poster session helped student broaden their horizons in research careers. The synergy of the REU program with other concurrently running high school summer programs on UAB campus will also be discussed.

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