

Melanie Oakes, PhD



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Manager

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My interest in science came as a surprise since my career plan had focused on teaching in primary or secondary schools. A general ed chemistry professor encouraged me to think about becoming a chemistry major that conversation sent my career plan on a very different path. I became a chemistry major and the experiences of an independent undergraduate research project and summer research program, were impactful such that this Southern California native ventured out of California to Oklahoma for graduate education at the University of Oklahoma Health Sciences Center. After graduating I returned to California for a post-doctoral fellowship at UCLA studying ribosome structure with Dr. James Lake. I then continued research within the ribosomal RNA field with Dr. Masayasu Nomura at the UCI. My research experience in basic science has provided me with an important understanding of the value that new technologies bring to a research project. Using yeast as a model system, my research projects at UCI explored regulation of cellular growth with a specific focus on the regulation of transcription of ribosomal RNA. During the course of the work, we identified and characterized polymerase I transcription factors and took advantage of yeast genetics to create mutants and subsequently analyze ribosomal RNA synthesis, nucleolar structure and cell growth. My interest in research continues to motivate me to be actively involved with projects that come to the Genomics Research and Technology Hub. In my spare time I enjoy spending time with family and being outdoors, walking, gardening, swimming and volleyball.