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## PEER LED TEAM LEARNING AND THE LIVING WORKBOOK

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Since 2001, The University of Texas at El Paso (UTEP), originally through grants from the National Science Foundation (I-STAR: Integrative Science Success, Teaching, and Retention Program), has developed and enhanced the talent pool of undergraduate students in science and engineering from the Paso del Norte region of the United States by implementing and honing the concept of peer led team learning (PLTL). Students register for workshops that are co-requisite with lectures in certain introductory science and mathematics courses. These workshops are led by peer leaders, students who have successfully passed the course and are selected for this role. Research has shown that the peer leaders are best able to facilitate the understanding and further refinement of concepts for undergraduates in these gatekeeper courses as opposed to learning only in a lecture setting. These peer leaders are equipped with an eclectic repository of educational techniques which are constantly refined and expanded through participation in weekly meetings, summer training sessions, travel to educational conferences, and generation and transmission of educational materials. Over

the course of UTEP's PLTL implementation, significant data have been gathered in terms of the impact that this program has had in improving several aspects of Science, Technology, Engineering and Mathematics (STEM) curricula and its absorption. UTEP was a founding campus in the formation of the Peer-Led Team-Learning International Society as well as the development of a funding mechanism via a living workbook which aid in sustaining the program. The concept and content of the workbooks will be also discussed in this presentation.

### Biography

Mahesh Narayan has completed his PhD in Biophysics at The Ohio State University and pursued Postdoctoral studies at Cornell University. Currently, he is a Professor of Chemistry at The UTEP and serves on the Editorial Board of *PLoS One* and *Cell Biochemistry and Biophysics*. He has published extensively in the areas of protein folding, Parkinson's disease and pedagogical inroads in Chemistry.

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