

**PROJECT NAME:** PathOlogical Life Sciences Training Program for Students and Families (aka University of Kansas Medical Center-NIH Science Education Partnership Award [SEPA])

**PROJECT LEAD:** Nancy Twillman, M.S.T.-E, MSW with Kristin Kush, MA, and Shirley Propps

**TIMELINE:** 5 years: Sept. 2008- through Aug. 2013

**CONTENT AREA:** Education, Pipeline program for underrepresented minorities in health professions

**FUNDER:** National Institute of Health-National Center for Research Resources (NCRR)

**CLIENT:** The University of Kansas Medical Center Research Institute, Inc. and the KU School of Medicine Office of Cultural Enhancement and Diversity

**AUDIENCE:** The University of Kansas Medical Center Research Institute, Inc., the KU School of Medicine Office of Cultural Enhancement and Diversity, Dr. Patricia Thomas (primary investigator), and local SEPA implementers.

**METHODOLOGY:** Mixed methods (qualitative and quantitative)

Science education partnership awards weave inquiry-based learning activities with targeted learning content to increase both student knowledge of science education and interest in health professions. Students actively engage in projects highlighting health issues and health disparities experienced by underrepresented minorities. SEPA projects include an emphasis on curriculum-sharing via the Internet to enhance the distribution of science curricula.

RDI serves as the external evaluators for the K-12 SEPA program components, This project uses pre and post instruments to examine changes in knowledge and interest, and participation in clinical research and clinical trials, as well as changes in student interest in life sciences and health professions careers. Qualitative measures are used to gain process data and to assess project implementation success.

The University of Kansas Medical Center's SEPA program "PathOlogical Life Sciences Training Program for Students and Families" incorporates five large, programmatic components to determine if programs and activities emphasizing clinical research and clinical trials for students and families increases their knowledge and interest and participation in clinical research and clinical trials, and increases student interest in life sciences and health professions careers.

**OVERVIEW:**

1. The PathOlogical Biomedical Training Program for Biomedical Library Interns: Four high school students each year are engaged in conducting library research on NIH, health disparity issues relevant to the local/regional community and rural Kansas, and identify research/evidence-based literature for use in other programmatic curricular components.
2. Biomedical Science Summer Program ("Camp PathOlogical"): Camp PathOlogical is an innovative 5-week inquiry-based biomedical science summer program for 24 underrepresented minority, underserved, or disadvantaged students in 11<sup>th</sup>-12<sup>th</sup> grades. Content-rich, pathology-based curriculum is developed and team-taught by multi-disciplinary, KUMC faculty, Kansas City Kansas Community College (KCKCC) math and science faculty, and Kansas City, Kansas Unified School District #500 teachers.
3. PathOlogical Seminars for K-12 Students, Teachers, and Parents: KCKCC

and Kansas University Medical Center faculty create topical genetics seminars for students, families, and community members. These seminars incorporate hands-on activities as participants rotate through learning stations addressing a variety of genetic curricular content.

4. Multimedia Program: During the academic year, 25 students develop PathOlogical Multimedia Information Programs. Using digital video technology, 11<sup>th</sup> and 12<sup>th</sup> grade students produce projects on DVDs that incorporate information regarding NIH-funded clinical research, clinical trials, health disparities, and annual topical issues.
5. Clinical Research Internships: Ten, 11<sup>th</sup> and 12<sup>th</sup> grade high school students partner with the Kansas University Medical Center General Research Center (GCRC) in hands-on experience in clinical and translational research projects. Participating students are paired with a wide range of researchers, gaining first-hand experience in a variety of research activities.
6. Dissemination of research-based health information and programs across the state, and the Greater Kansas City area using web-based technology: Staff prepare and disseminate all curricula, research, and media products developed.

SEPA website: [www.ncrrsepa.org](http://www.ncrrsepa.org)

Project website: [sepakansas.org](http://sepakansas.org)

**LINKS:**

Total project funding                      \$1,250,000