

Press Release-

## Cancer Center becomes Learning Center for Piner STEM teachers !



As their students while away **their summer** in the sun, Piner High STEM teachers were immersed in learning about cancer and careers in Clinical Research. St. Joseph Cancer Center hosted an integrated team of teachers to expose them to the daily work and offer expertise as they create curriculum for the upcoming school year. STEM coordinator Judy Barcelon, who represents both Biology and Health Science/Biotech, alongside her forward thinking colleagues, Karen Coster (English) and Heather Benson (World History) spent 4

**Piner High STEM teachers @ Clinical Career Externship sponsored by St. Joseph Health & NCPAA grant funding. (L-R) Heather Benson ( Social Science), Karen Coster ( English) & Judy Barcelon ( Health Science & Biotechnology)**

days at the center learning the details of clinical research such as inclusion criteria, patient intake (EKG, vitals), preparing investigational medicines and sometimes (with consent) being allowed to interact directly with patients. Ms. Benson was impressed with the need, in all areas, for critical reading in following exact directions and protocols, effective communication to inform patients exactly what the study will entail and the power of an effective team approach to healthcare.



**Kayla Den Beste, Research Associate shows Karen Coster ( L) and Heather Benson how patient samples must be collected, processed or packaged with precise documentation and attention to details such as labels and lot numbers.**

Teachers were sponsored by the NCCPA grant and the Sonoma County Office of Education CTE department, while the CTE (Career Technical Education) Foundation will provide student support for materials and equipment which demonstrates how our community supports career exploration in the medical field alongside St. Joseph Health as our industry partner. Health Science/Biotech students will be challenged with a performance task scenario that emulates the work flow seen at the cancer center. This will involve students reviewing redacted patient charts to determine if they meet the inclusion criteria to enroll in a study, then practicing the skills used in patient intake such as taking vital signs, using an EKG and processing lab specimens. The end product will be presented as a simulated tumor board where students will present evidence of the efficacy of a trial rug using actual medical realia such as CT scans, blood work and pathology slides.



**Teresa Lund, CRC, demonstrates how to prepare a vaccination to Judy Barcelon. Well defined protocols and documentaion are the mainstays of Clinical Research**

Reflecting on the impact of this project, Ms. Barcelon sees clinical research as an exciting and expanding field that applies principles of Science and emerging technologies with a humanistic aspect that keeps patient care at the forefront as their mission and brings great satisfaction to all employees. To learn more about the Clinical Research being done at St. Joseph, she recommends their great website about [Clinical Trials and Research](#).

The integral factor weaving in other core curricular areas is that most all of Piner's sophomores will read and process the *Immortal Lives of Henrietta Lacks*. English teachers will be taking the lead on exploring the wide array of thematic topics in the book- including why it has been challenged in school districts. World History will support their students with exploration into ethics, the Scientific revolution and their own medical history and US History by exploring Jim Crow laws and the history of medical research. Biology students will explore the science of cancer along with cells and cell division.

Many thanks to Kim Young, RN and her dedicated team of clinical research coordinators who took the time to share their work experiences and career paths with the teachers. Ms. Coster was fascinated by the many facets and challenges of clinical research. The takeaway message is that with such a variety of entry points and potential to move up, this career cluster has high appeal to our students.



Research Director & RN, Kim Young alongside CCRC Stephanie Bjornstrom demonstrate how to use an EKG machine to collect patient data.

Implementation will be during first semester with a planned Cancer Awareness day November 18th on the Piner campus. St. Joseph will be one of many supporters present to work with students not only with questions and concerns regarding health but how their future could be in healthcare. If you are interested in becoming part of of this project, contact Piner STEM Coordinator [Judy Barcelon- jbarcelon@srcs.k12.ca.us](mailto:jbarcelon@srcs.k12.ca.us).

Funding for this project was provided directly to the teachers by the [Northern California Career Pathways Alliance](#) as well as being awarded a competitive [CTE Foundation grant](#) to provide equipment such as dual stethoscopes, EKG supplies and transportation for a site visit.