THE NEED
To democratize the systems medicine approach, we need to:

➢ Empower individuals with the skills and knowledge necessary to participate in managing their own health, and to advocate for the well-being of their communities
➢ Prepare a new generation of collaborative and interdisciplinary STEM and healthcare professionals for the novel demands of the systems medicine framework

MEETING THE NEED
We are developing a Systems Medicine Education curriculum for high school students to:

➢ Learn the principles and practices of systems medicine
➢ Engage in cutting edge science
➢ Build and deepen their interdisciplinary skills
➢ Explore STEM and healthcare careers focused on biology, engineering, computer science, environmental sustainability, biomedicine, big data, and technology

OUR APPROACH
Students will be introduced to systems medicine through:

➢ Case studies focused on various factors impacting health (lifestyle and behavior, the environment, genetics, the microbiome, social networks, and access to healthcare) and their relevant disease outcomes (cancer, diabetes, stress)
➢ Role-playing STEM & healthcare professionals to experience the multidisciplinary approach of systems medicine
➢ Exploration of analytic tools and biological data sets to create predictive and actionable models for wellness and disease
➢ Investigation of a local community health issue

WHAT IS SYSTEMS MEDICINE?
Systems medicine uses genetics, a breadth of personalized data, and tailored health coaching to proactively optimize wellness and minimize disease.

BUILDING THE COURSE
Completed
✔ Develop course framework (with OSPI)
✔ Define scenario
✔ Identify existing resources

In Progress
● Develop curriculum and web resources
● Teacher training and optimization

Upcoming
○ Summer Course 2019: "STEAM Towards a Healthier World"
○ Broad dissemination of completed curriculum (2022)

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