



## **Description of *On Track OHSU!* Program Activities**

### **Grade 6-8 – Science of Healthy Life Styles and Development as a STEM Learner**

There will be five main interactions with students in grades 6-8, outlined below:

- Let's Get Healthy Fair - October/November  
The kick off for the middle school program will be a Let's Get Healthy Fair (LGH), put on by OHSU's CROET. Each middle school site (Valor, French Prairie, and SEI) will have its own fair which will take place during the school day. The schools will invite community members to also participate.
- In school visit during health classes  
OHSU programs and high school student volunteers visit middle school students during their health classes. The goal is that the middle school students become more comfortable talking about health and science careers, and begin to identify themselves as STEM learners. Students also learn about the neuroscience behind learning, and how drugs and alcohol affect learning.
- OHSU half day experience - May  
The last interaction with the middle school students will be a visit to OHSU. We will invite all participating students from Woodburn and Portland to campus on the same day, where they will participate in a panel discussion and interactive stations with OHSU students and professionals.
- Additional Opportunities Available to Students  
Students are invited to attend the OHSU brain fair in March, and will have the opportunity to participate in a summer Saturday Academy math course.

### **Grades 9 and 10 – Exploring Health Science Careers**

There are three main interactions with students in grades 9 and 10, with a focus on developing their knowledge of different types of careers in the health and sciences. This developed after conversations with their teachers, asking for programming that exposed their students to a variety of careers and options, so they could understand the huge range and variety of options they have within this career path.

- Discover Careers – October/November  
Students will rotate in small groups to six different professionals with a range of careers in clinical and research careers, such as cardiac sonographers, clinical engineers, physician

assistants and neuroscientists. They will be able to have one on one conversations with these professionals and ask questions about their specific jobs and career paths.

- In School Visit with Mentors - December/January  
OHSU student mentors will go to the high schools and in small working groups, help students create an education timeline, specific to their goals of having a STEM career. Students will be using their iPads and exploring the College Board “Big Future” website with the assistance of some guided notes and OHSU mentors. Students learn about how to figure out interest, how to prepare for the SAT, what classes colleges look for, and college search tools. They also learn from the OHSU mentor about their personal pathway and what challenges they came across with applications.
- Discover Careers II – March/April  
Students will come back to OHSU and participate in a follow up Discover Careers Visit, again meeting in small groups with professionals from a range of clinical and research careers. They also have a presentation about safety in the workplace, specifically designed for young workers who may be preparing for their first job, sponsored by the CROET.
- Additional Opportunities Available to Students  
Students are invited to Brain Fair in March. Additionally, Students will be invited to participate in a summer Saturday Academy math course.

### **Grade 11 and 12 – Exploring Education Pathways and Academic Preparation – Next Steps**

Students in grades 11 and 12 will participate in four main interactions with OHSU, furthering their exposure to clinical and research components in STEM and focusing on where to take their interest in health and science past high school.

- Visit A - In School Visits with OHSU mentors – Oct/Nov  
This visit provides students an introduction to the many facets of OHSU, from education and research to health care. A group of 8-12 OHSU students from a variety of OHSU’s schools and programs lead this visit which takes place in the high school classroom. The OHSU students, acting as role models for the younger students, share their personal stories for how they got to where they are today. Then they discuss issues such as the challenges they had to overcome, why they chose this career path, and some of the steps that they weren’t expecting along the way. Next, they share “tools of the trade” with the high school students. Each OHSU student brings something that they may work with in their field of study (i.e. dental models, fruit flies, a blood pressure cuff) and in job-like groups, discuss with the younger students about the various fields they are pursuing.
- Visit B – Body Systems and Translational Research – Nov/Dec  
**11<sup>th</sup> grade:** Students will visit OHSU for a full day visit focusing on “Body Systems”. In the morning, students will learn in small groups at stations about how medical professionals are able to image the body. They will hear about the digestive system, respiratory system, nervous system, and circulatory system. Then, during lunch, they can reconnect with OHSU students they met during the first visit at their school. In the afternoon, again in small groups,

students will see actual parts of each system through the use of donor or animal anatomy presented by OHSU professionals and students.

**12<sup>th</sup> grade:** students will visit the Oregon National Primate Research Center for an introduction to the center and a tour. After lunch, they will participate in an interactive lesson that teaches the role of ethics in science/biomedical research. They will also attend and participate in a panel discussion of research scientists at various levels in their careers.

- Visit C – Translational Research and Simulation

**11<sup>th</sup> Grade:** Students will visit OHSU for a full day visit focusing on Translational Research. Students will learn why research is important and how it is relevant to health and health care, reinforcing that research leads to improvements in healthcare. In the morning students will participate in a mini Let's Get Healthy fair, visiting stations exploring cancer, nutrition, and epigenetics. After lunch, students will be split up into smaller groups, and each group will go to a different lab (researching cancer, nutrition or epigenetics). A lab member will introduce the lab's primary research, discuss some specifics of the lab, show them different pieces of equipment, and explain the implications of their research for human health.

**12<sup>th</sup> Grade:** Students will visit OHSU for a full day visit focusing on clinical skills and simulation. In the morning they will visit the ADP nursing lab, where staff and nurses will present the mannequins and demonstrate how they are used to train health professionals. Students will then get a chance to practice in small groups on some mannequins. In the afternoon the students will travel to Marquam Hill and have lunch with OHSU students that they met during the other visits. They will then visit the VirtuOHSU center, where surgery residents will speak with students about their personal stories and careers to that point. The residents will then help the students explore various hands-on stations, including hand washing as a surgeon, suturing with pig feet, exploring the DaVinci robot, and using laparoscopic box trainers.

- Visit D – Educational Plans and next steps, In School Visit with Mentors – April

The final visit will focus on the students' Educational plans and next steps. The same 8-12 OHSU students will be invited to join us for this visit, along with advisors from the community colleges and the Center for Diversity and Inclusion at OHSU. OHSU students will answer some frequently asked questions, such as "what do you do with all your spare time in college?", and "how do you choose your classes?". For 11<sup>th</sup> grade students, the focus will be on steps to take over the summer to be prepared to apply in your senior year. 12<sup>th</sup> grade students will focus on college success and study skills as well as how to choose a science major and important classes to take.

- Additional Opportunities Available to Students

Students in the 12<sup>th</sup> grade have the opportunity to attend college readiness workshops through *On Track OHSU!* and their local community college (Jefferson with Portland Community College – Cascades, and Woodburn with Chemeketa Community College). In the Fall, they will receive information on the application process, how to choose a school, requirements of different programs, and what the next steps are.

Students are invited to attend Brain Fair in March and OHSU's Career Conference in February.

11<sup>th</sup> and 12<sup>th</sup> grade students will have the opportunity to apply for a paid summer research experience or a Saturday Academy summer course.

Interested 12<sup>th</sup> grade students will have the opportunity to take an SAT prep course in the fall.