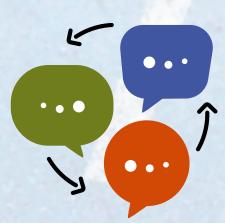# HOW BIT HTD WILL RUN...

HIGH-THROUGHPUT TECHNIQUES

We will learn about high-throughput techniques and studies through the analysis of a series of **case studies and JoVE.com videos**. Each case study and scenario will include critical thinking and reflection questions. We will use forums to share our findings.

DISCUSSION FORUMS

Discussion forums allow us to share our thoughts and findings in an online environment. Don't be afraid to use the **audio** and **video** recording options, share **images**, **links**, and anything else that helps convey your thoughts!

INDIVIDUAL & TEAM QUESTS

Questions on forums and from case studies will launch you on weekly individual and team quests to **search** for information to **connect** knowledge to campus, regional, and national research and initiatives.

WEEKLY MIX TAPE

I will provide weekly **audio recordings summarizing key concepts** and stating questions to think about as we dive into the analysis of case studies and scenarios.

AUTHENTIC PROJECTS

I have high expectations and believe all of you have fantastic ideas to contribute. Groups will design, research, and write **proposals for JoVE.com** publications highlighting automation with Opentrons OT-2 liquid handlers to answer authentic biological questions about the unique microbe *Delftia acidovorans*. Individual **portfolios** summarize your research on a topic you choose in accessible ways to be posted on the public course website listed below.

MY PHILOSOPHY...

NO "THROW AWAY" ASSIGNMENTS

We will learn about high-throughput techniques and studies through the analysis of a series of **case studies and JoVE.com videos**. Each case study and scenario will include critical thinking and reflection questions. We will use forums to share our findings.

I WILL CHALLENGE YOU

This course is challenging, and we will discuss numerous complex topics. The assignments closely resemble real-world applications. **I believe in you, believe you, and will treat you with respect.** I acknowledge my personal biases and will work with every single participant to **create a community** that fosters inclusivity, creativity, and critical reasoning.

I WILL RUN WITH YOU

I am a professor but do not wish to *profess*. I will **facilitate** discussions that encourage us to **think deeply** about the topics, datasets, techniques, and applications. I will let you do the learning but work through facilitating discussions that include the **ethical and diversity implications** of the molecular biology approaches we discuss.

I WILL NOT LEAVE YOU

As an educator, **I want you to *learn*** and help you evaluate your development and growth. I will use phrases such as "not there yet" and "there is room for growth" along with detailed feedback for you to improve. No assignment is *final*, and we will work together to *master* the material and craft resources that will help you and others later on. **I will help you self-evaluate your progress** through the course and successfully complete assignments.

I WILL BE READY

As an educator, **I truly love designing learning experiences based on evidence.** I treat my course design as a science experiment. I carefully plan assignments, interactions, and resources for you to develop, grow, and master the material. I will work to ensure resources to help you learn are available, and I am ready to assist you on our journey.

LET'S GO!