

<b>Overview</b>	1
About STEM Speaker Series	1
What is bioinformatics?	1
<b>Schedule</b>	2
<b>Contact</b>	2
<b>Meet our speakers</b>	3
<b>Virtual Community Guidelines</b>	4

## Overview

SFU Applied Sciences Outreach offers fun, engaging workshops and resources that encourage youths to explore topics in Science, Technology, Engineering, and Mathematics (STEM). We aim to not only enhance STEM literacy among youths in BC, but also foster an appreciation of how science can be used to make sense of the world we live in and improve how we do things.

### About STEM Speaker Series

The Science, Technology, Engineering, and Mathematics (STEM) Speaker Series provides secondary school students with the opportunity to meet and interact with role models in STEM fields. During this event, our guest speakers, which consist of graduate students, faculty members, and/or working professionals, will talk about their career path and what made them pursue the field they are in. They will also present and discuss a meaningful project they have worked on or are currently working on. Finally, there will be a Q&A session for students to ask questions and interact with our guest speakers. This speaker series is also open to the public as we want to encourage parents, guardians, and teachers to join us in supporting youths who are interested in pursuing post-secondary studies in these disciplines.

### What is bioinformatics?

Bioinformatics is an interdisciplinary field that involves a wide range of scientific disciplines, including genetics, molecular biology, computer science, statistics, and information engineering. Scientists in this field of study employ computational methods and statistics to understand biological phenomena and function. Significant contributions of this field include identifying disease-causing genes, developing software to analyze large-scale biological data, exploring microbial communities in our guts, and many more!

If you are interested in pursuing this field of study and would like to learn more, join our upcoming event to e-meet scientists who are working in this area. See details below.

## Schedule

Date: Feb 20, 2021 (Saturday)

Time: 1:00-2:00 pm\*

Topic: Bioinformatics

Location: Virtual via Zoom

Audience: Grade 9-12 students + members of the public (e.g. their parents/guardians)

Sign up link: <http://websurvey.sfu.ca/survey/392700393>\*\*

\*The meeting link will be opened 30 minutes before the talk starts for students to test their setup (e.g. is your audio working?).

\*\*Please use the link to sign up by Feb 14 (Sunday, 11:59 pm). Further details (e.g. Zoom links) will be sent to students by Feb 17 (Wednesday) at 5:00 pm. If you're a parent/guardian or a teacher who is interested in joining this talk, please contact Eva at [sacoord@sfu.ca](mailto:sacoord@sfu.ca).

## Contact

If you have questions, please do not hesitate to contact Eva (Outreach Programs Coordinator, SFU Faculty of Applied Sciences) at [sacoord@sfu.ca](mailto:sacoord@sfu.ca).

## Meet our speakers



### **Dr. Vanessa Guerra, Post-doctoral fellow at Simon Fraser University**

Hi there! My name is Vanessa. I (very) recently earned my Ph.D. in Biology from Simon Fraser University. I now work with a multi-institutional Marine Network Consortium in California as a Postdoctoral Scholar. In my new job, I will be using genomics data from marine organisms to better understand community-level changes driven by environmental changes. One of the aims of the project is to provide government officials with information that could be used to confront climate change. I was born in Peru, and my love for the ocean goes as far back as I can remember. Most of my hobbies are ocean related (SCUBA diving, kayaking, fishing, etc.), but I also like to garden, cook, and go on long walks with my girlfriend.



### **Kristen Gray, PhD candidate at Simon Fraser University**

Kristen Gray is a PhD candidate at SFU who studies molecular biology and bioinformatics. Her work focuses on better understanding bacterial pathogens by studying regions of their genomes that can be transferred to unrelated lineages. Kristen has also been involved in initiatives to foster networking and collaboration among local bioinformaticians, including helping to organize an annual genomics hackathon known as [hackseq](#).

## Virtual Community Guidelines

Welcome to the STEM Speaker Series! This speaker series provides secondary school students with the opportunity to meet and interact with role models in STEM fields. This speaker series is also open to the public as we want to encourage parents, guardians, and teachers to join us in supporting youths who are interested in pursuing post-secondary studies in these disciplines. Before you join us, there are some guidelines we need everyone to follow to maintain the safety of everyone involved. See below for our Virtual Community Guidelines.

**Personal Safety:** We take safety seriously. If harm is disclosed or discussed (harm to self, or harming others) then we will take the appropriate steps to ensure your continued safety and the safety of those around you. Threats about others personal safety will not be tolerated.

**Respect:** Treat those online as you would treat them in-person that is with respect, dignity, and care.

**No Hate Speech or Bullying:** Bullying, discrimination, and harassment of any kind will not be tolerated.

**Communication:** Communication is encouraged in this workshop. Communicate with respect and listen to others when they speak or share ideas, which includes when sharing ideas out loud or via the chat function. Mute your microphone when not speaking and only turn your video on if you feel comfortable to do so.

**Privacy:** Respect the privacy and personal information of those in the shared virtual space by not sharing information that is not your own. Respect your own privacy by not sharing any personal information with those you do not know. Sharing of the Zoom link with those outside of the specific intended group is strictly prohibited.

**Copyright:** There will be no recording of anything that happens in this space, which includes participants and instructors taking pictures, recording parts of the workshop or recording their screen during any part of the workshop.

By joining our STEM Speaker Series, you are considered to be in agreement with the above community guidelines. We will take the appropriate actions if any of the above guidelines are violated. Depending on the situation, this may result in revoking participation in the remaining events/workshops. Thank you in advance for your commitment for keeping our virtual events and workshops engaging, safe and of course, fun!