

Genome Sciences Seminar

Wednesday, 11.29.23 | 3:30 | Foege Auditorium

remote viewing option: https://depts.washington.edu/gsrestrc/remote.htm



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"Defending animal development from a hostile world"

We develop from a single fertilized egg into adults with trillions of cells. Embryonic cells talk to each other to coordinate the construction process. Cells are master linguists - they use dozens of different languages, known as cell signaling pathways, to share information across the embryo. Sometimes cells speak multiple languages simultaneously; sometimes they switch languages. During development, cells are also dividing and moving around the embryo. How can we decipher the blueprint for this complex and dynamic construction project?

Our lab builds tools to listen to the languages of the embryo and record them into DNA. We can recover these records to understand the construction of an adult animal. We use a variety of techniques including CRISPR, single-cell sequencing, genetics, microscopy and mathematics to tackle these questions in zebrafish.

Questions? Contact Brian Giebel at bgiebel@uw.edu or visit the Seminar website at http://www.gs.washington.edu/news/seminars.htm

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