OIST OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY GRADUATE UNIVERSITY
沖縄科学技術大学院大学

OIST Presidential Lecture

Signaling at a Distance: Communicating by Touch for Development and Cancer

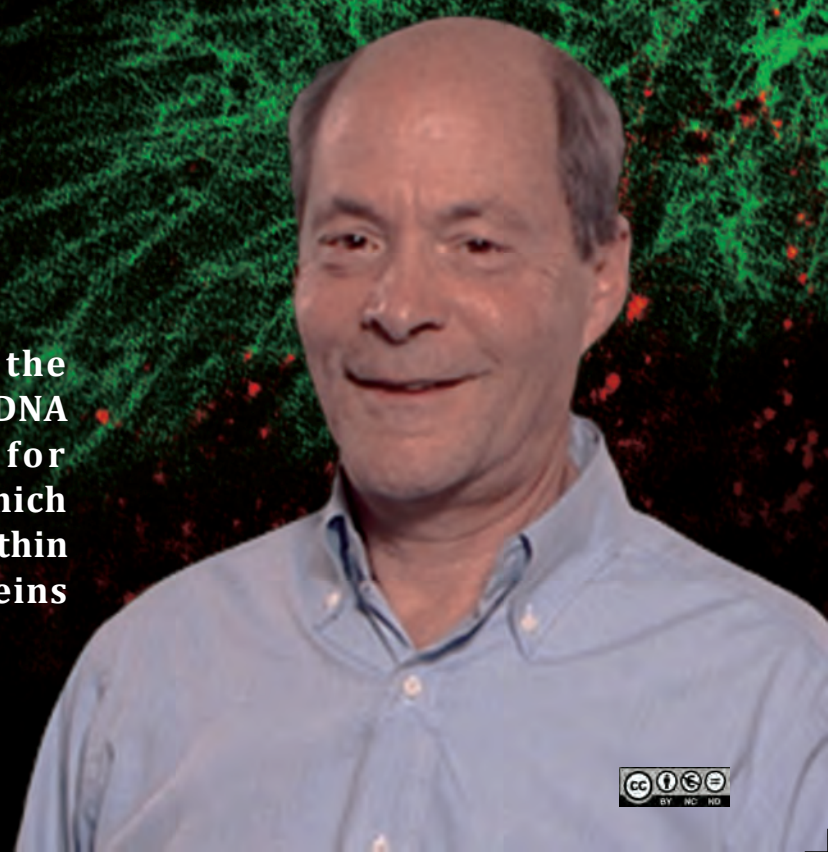
Fri, Nov. 22
10:30 to 12:00
Sydney Brenner Lecture Theater
B250

We have known since the early 1900s that certain cells have the ability to induce responses in other cells, but how these inducing signals travel from cell to cell remained unclear for some time. In his lecture, Dr. Thomas Kornberg will explain this process, giving an in-depth look at how specialized "cell fingers" called cytonemes transport pattern-generating signaling proteins between cells and transfer these proteins at cell-cell junctions that are functionally and structurally similar to neuronal synapses. This cytoneme-mediated signaling is the basis for cell-cell communication in both development and disease.

Dr. Thomas Kornberg

Professor of Biochemistry and Biophysics, University of California, San Francisco

Dr. Kornberg is a professor in the Cardiovascular Research Institute at the University of California, San Francisco. His discovery and characterization of DNA polymerase III established the mechanism of DNA polymerization for chromosomal replication, and his investigations into the mechanisms by which cells communicate over long distances led to the discovery of cytonemes, the thin cellular projections that are specialized for the exchange of signaling proteins between cells.



✉ contact@oist.jp