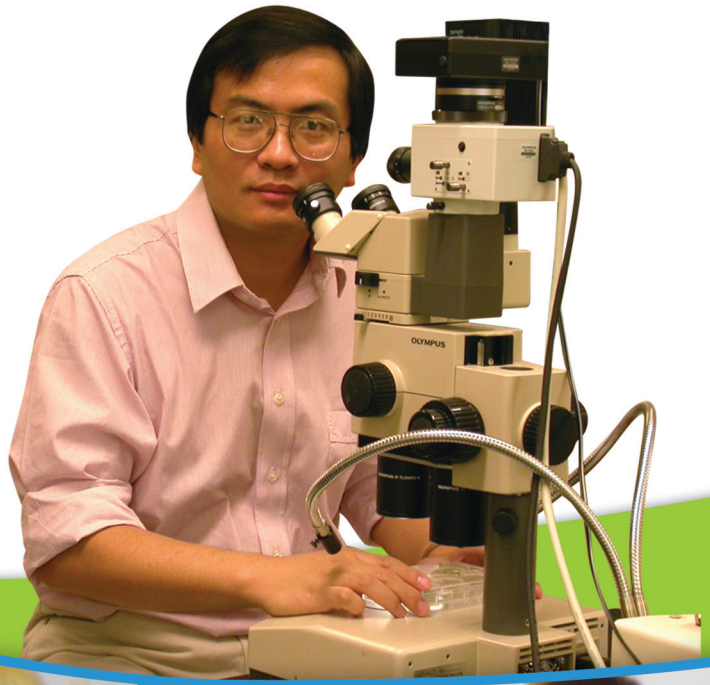
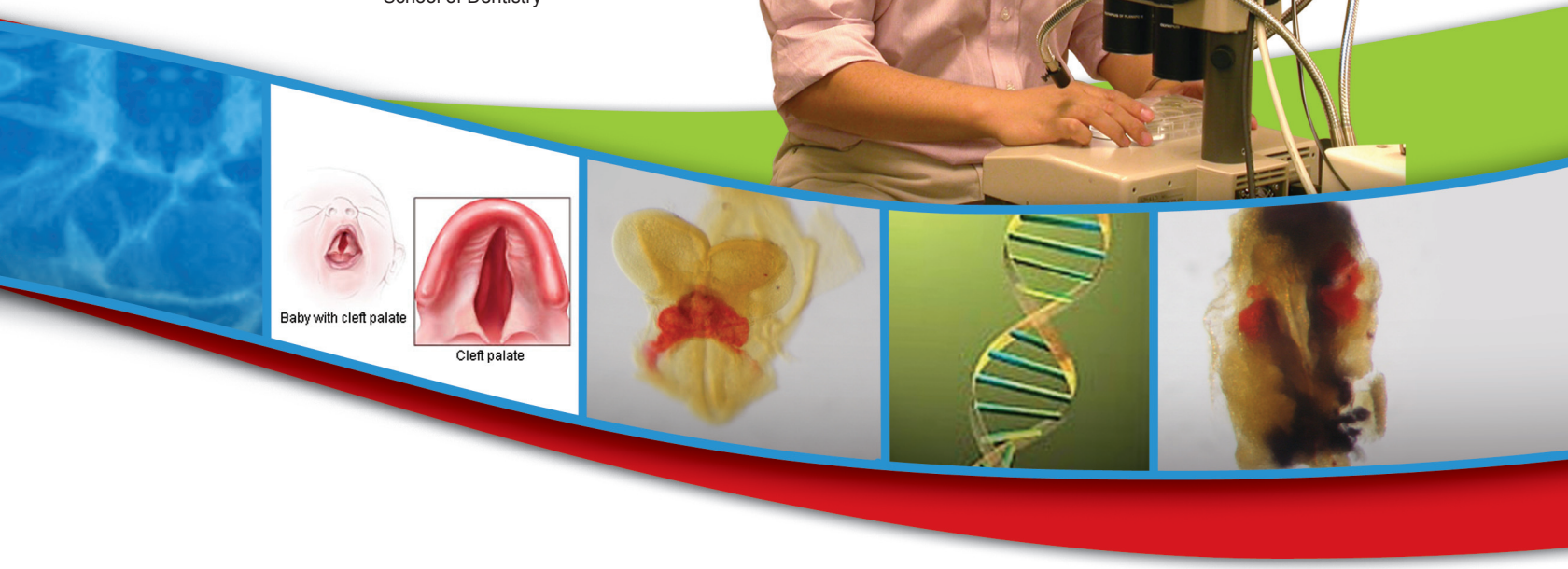
## Jixiang Ding, Ph.D.

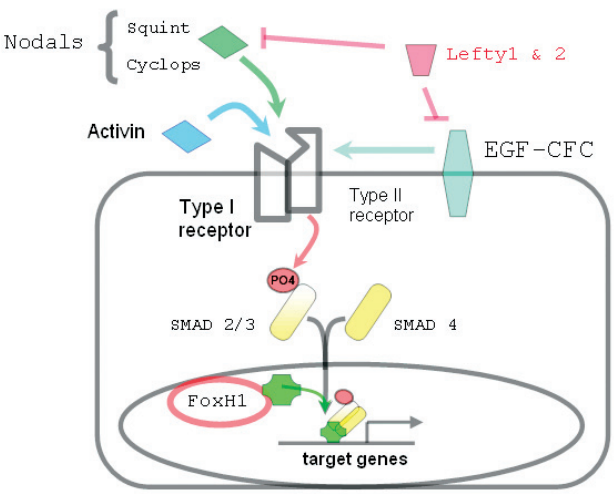
**Associate Professor**

Departments of Molecular,
Cellular & Craniofacial Biology

School of Dentistry




## Research Narrative:

The research in Dr. Ding's laboratory is aiming to elucidate the molecular basis of congenital diseases through understanding the molecular pathways and genetic programs that control fundamental embryonic processes such as axis formation, cardiac development, craniofacial morphogenesis and patterning. On going studies address TGF-βs and Nodal signaling pathways during holoprosencephaly (HPE) and other craniofacial malformation such as cleft palate using genetically manipulated mouse models. We have also addressed the formation of the first and second heart fields and dynamic relationship between the two heart fields during mouse cardiac morphogenesis. The results from these studies will provide significant insights into the mechanisms underlying facial abnormality and congenital heart diseases, two extremely common birth defects in US and world wide.

## Grants Funded:

**Role:** Principal Investigator
**Title:** Mechanism of mammalian embryonic heart formation
**Funding Agency:** KSEF
**Total Direct cost requested:** $72,000
**Period:** 07/01/2010-06/30/2012

## External Professional Activities:

Grant review for MRC, UK.