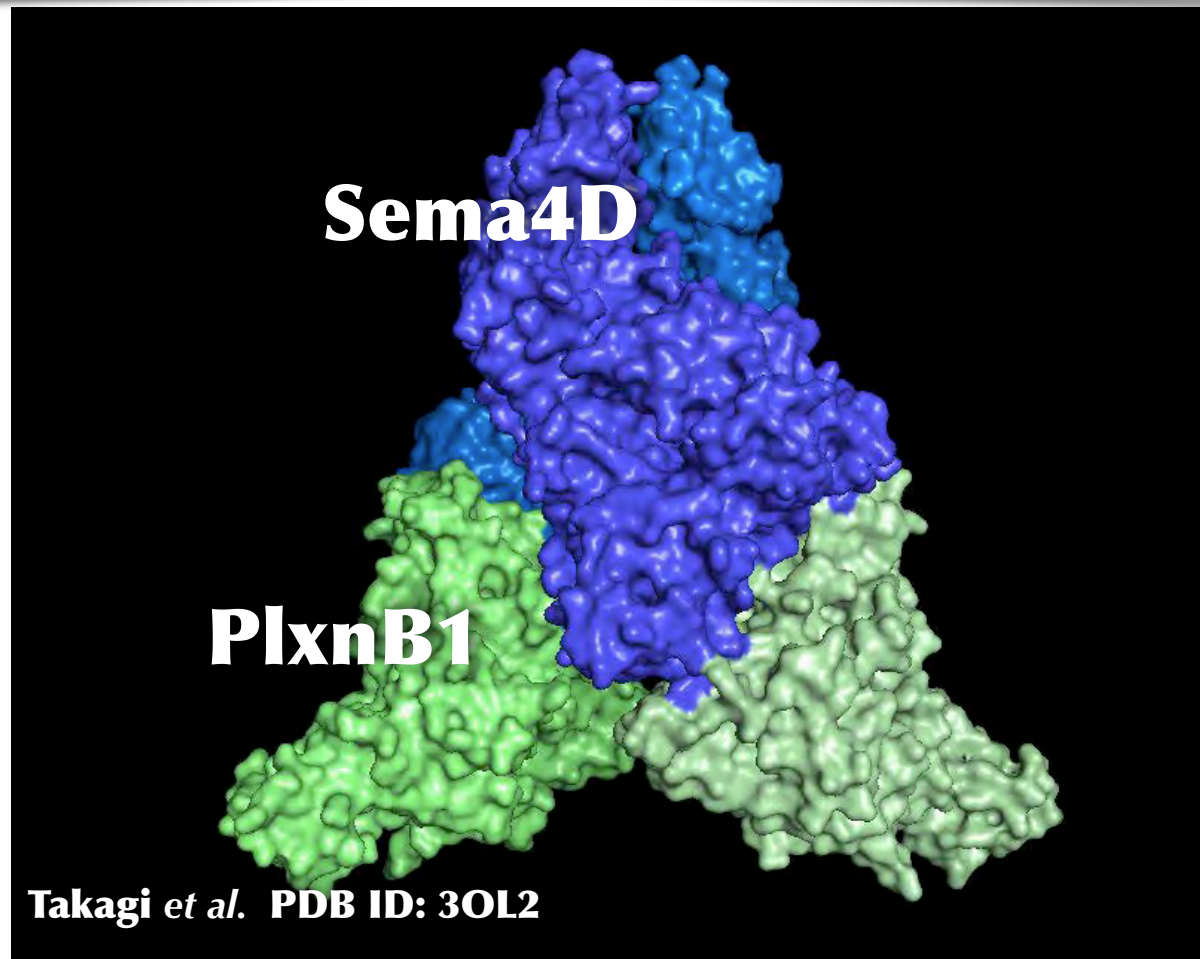


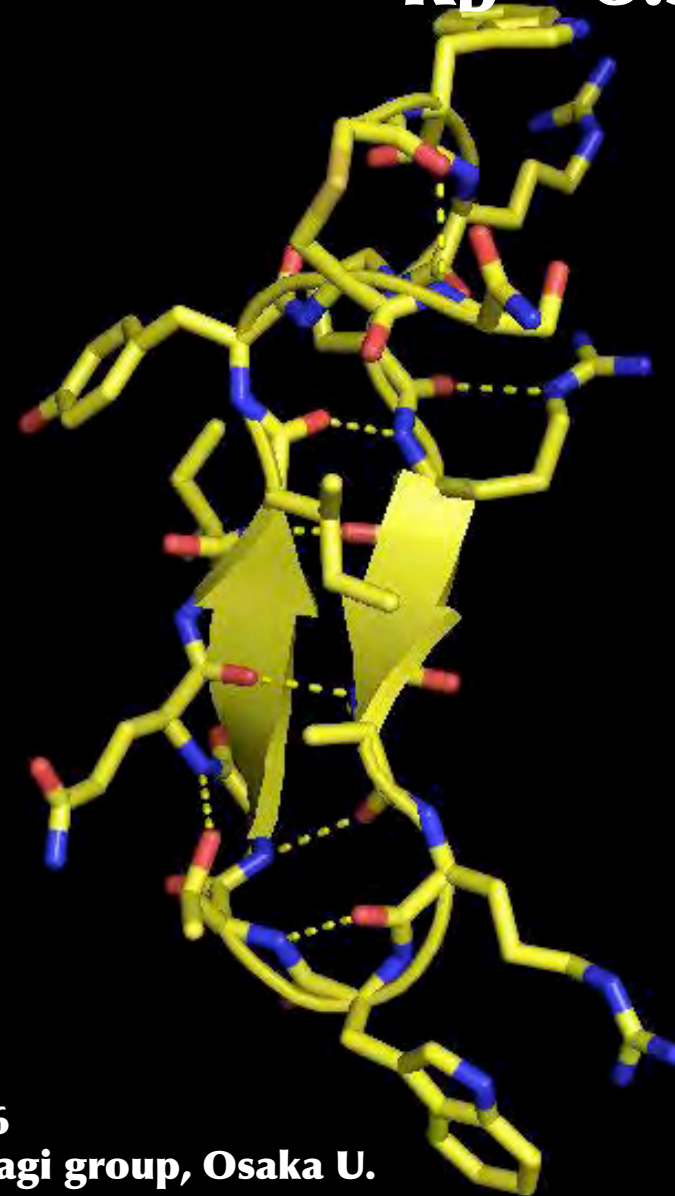
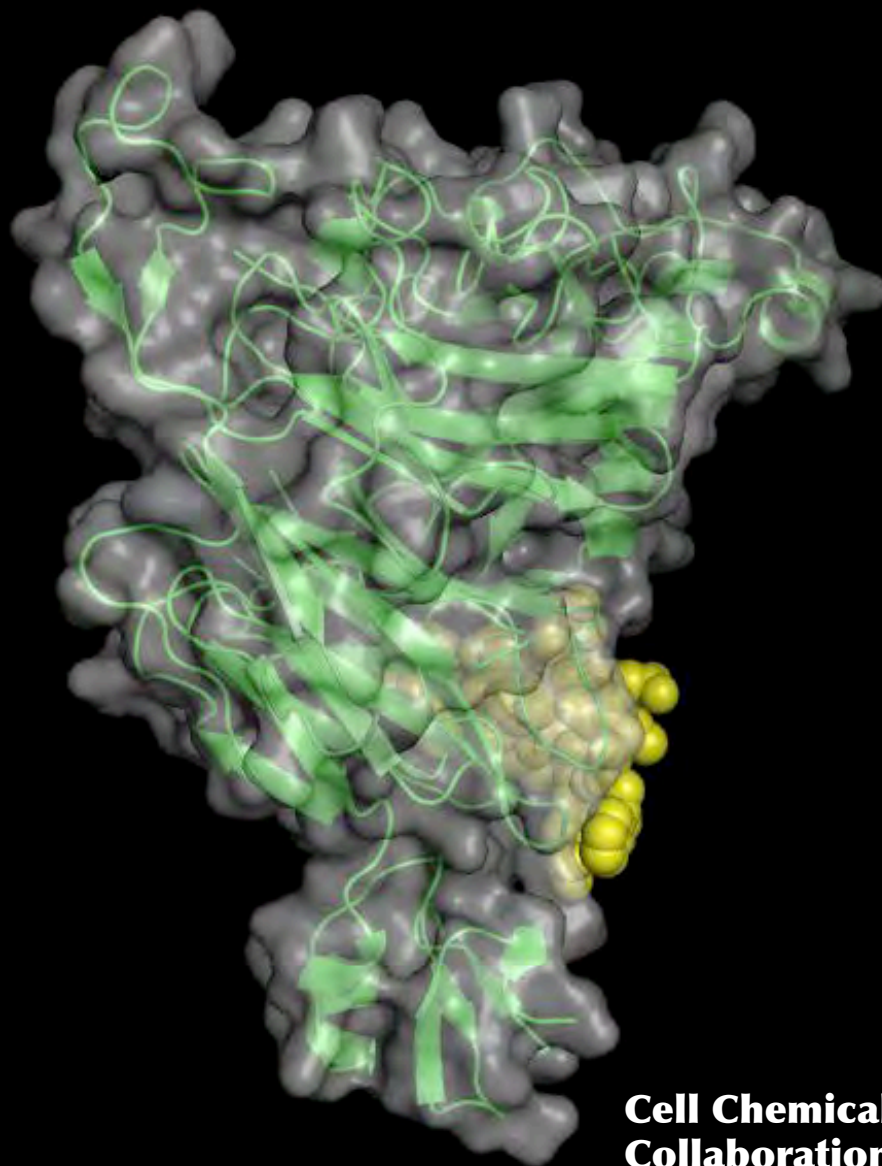
# PlexinB1 : 骨の恒常性を制御する膜タンパク質

- 300 kDa 一回膜貫通膜タンパク質 (細胞外ドメインを緑で示している)
- Semaphorin4D (青) に結合して2:2の4両体を形成する
- この相互作用が神経の発生、骨の再生・分解(恒常性)、炎症等を制御する



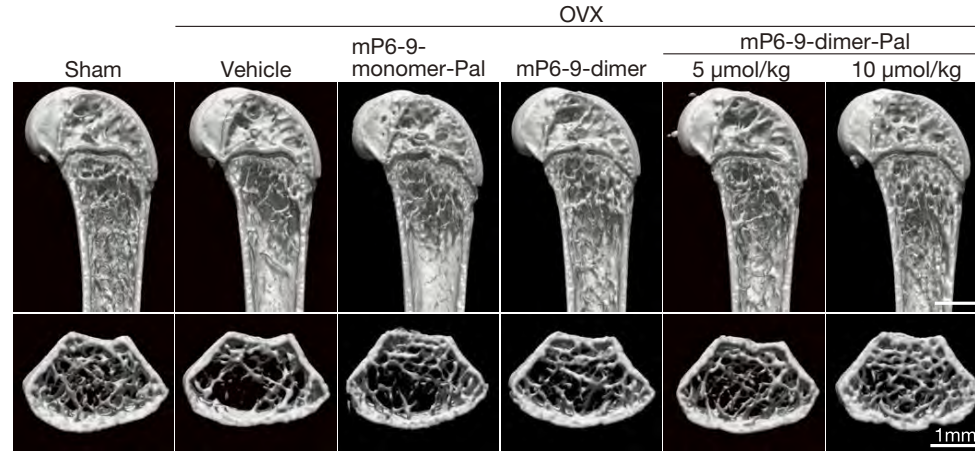
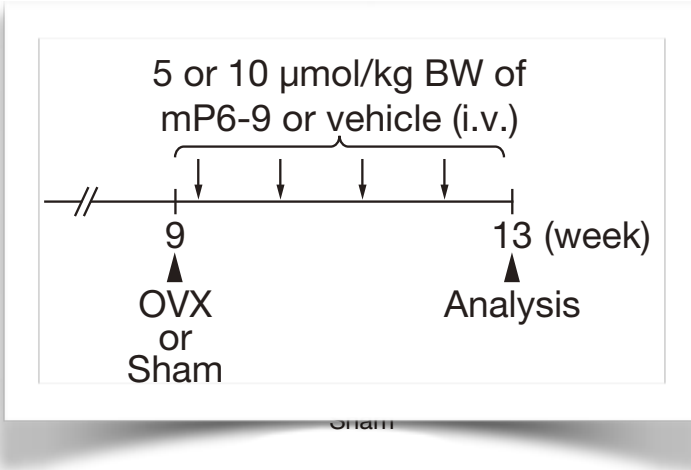
# PlexinB1に結合する特殊ペプチド

$K_D = 3.5 \text{ nM}$

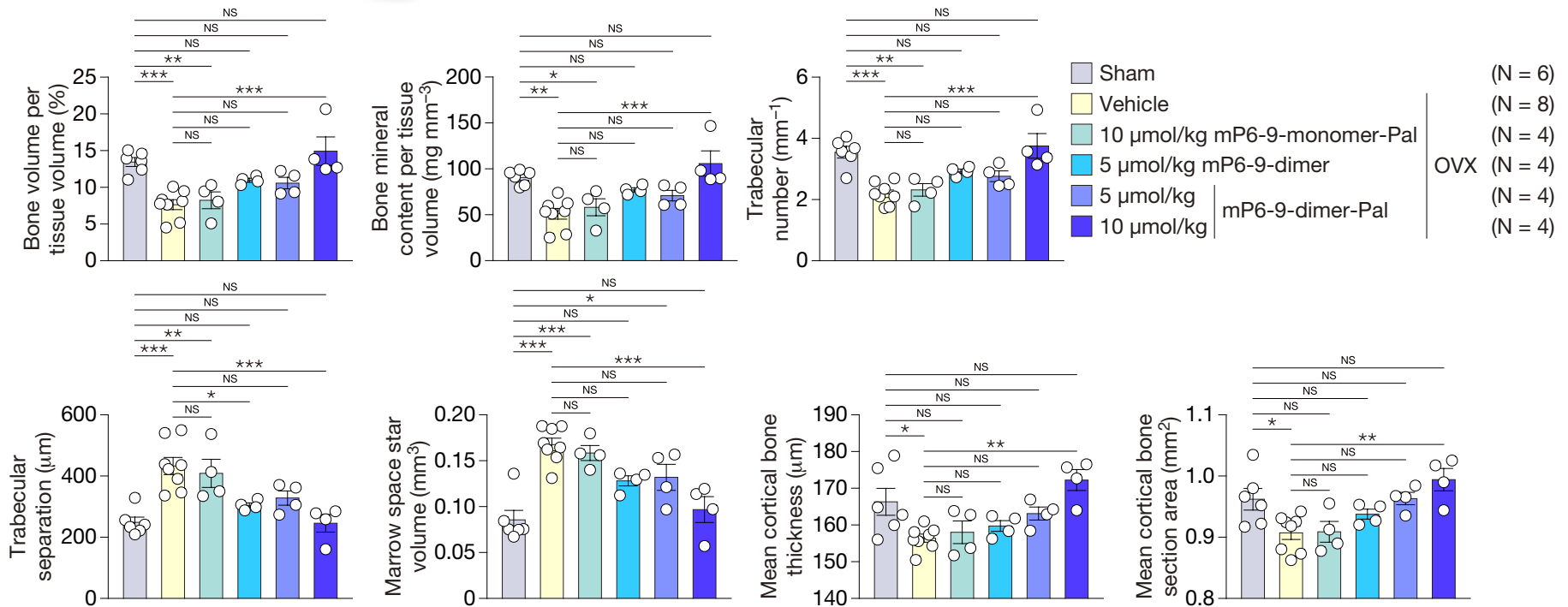


Cell Chemical Biology 2016  
Collaboration with the Takagi group, Osaka U.

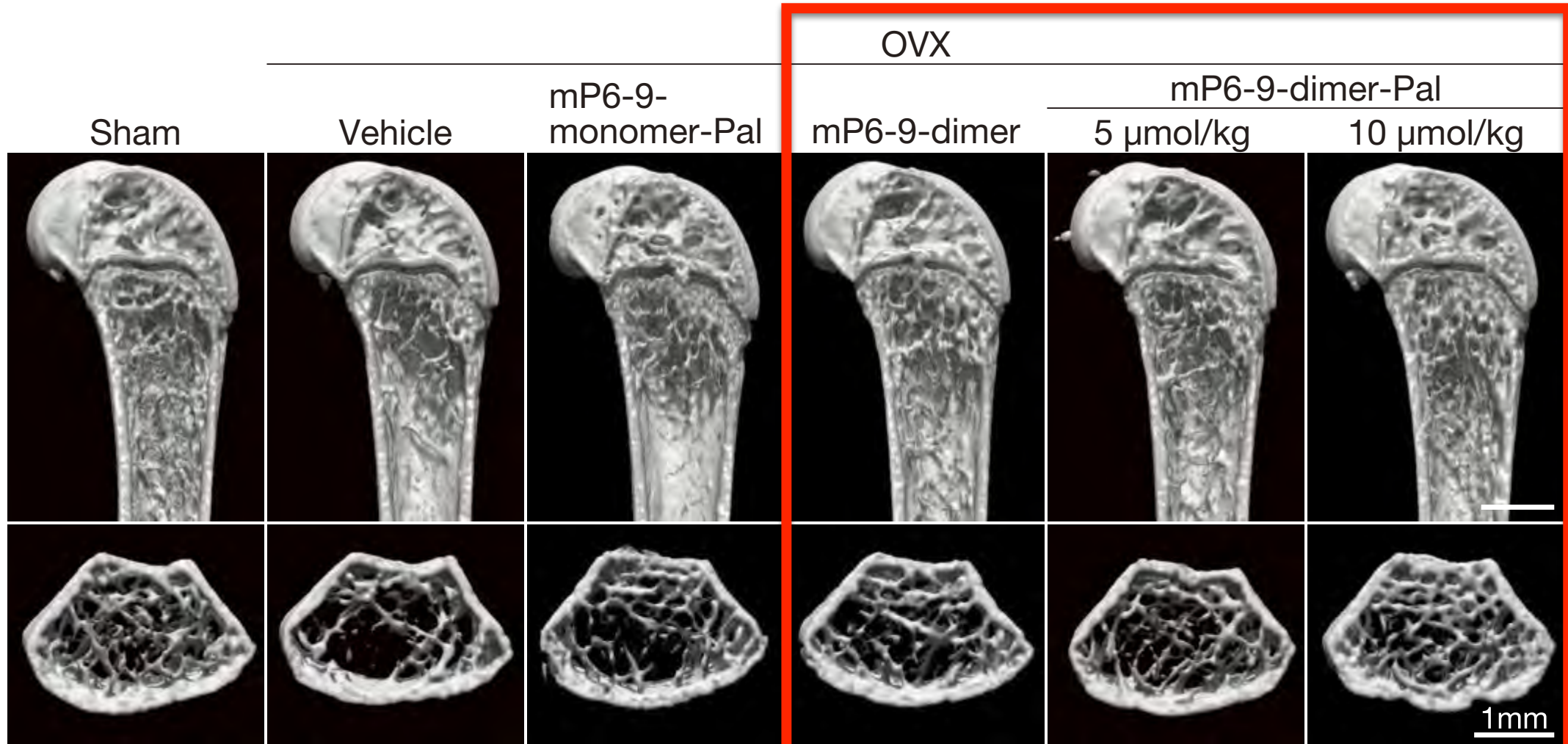
# 特殊ペプチドは卵巣欠損マウス動物モデルの骨を回復させる



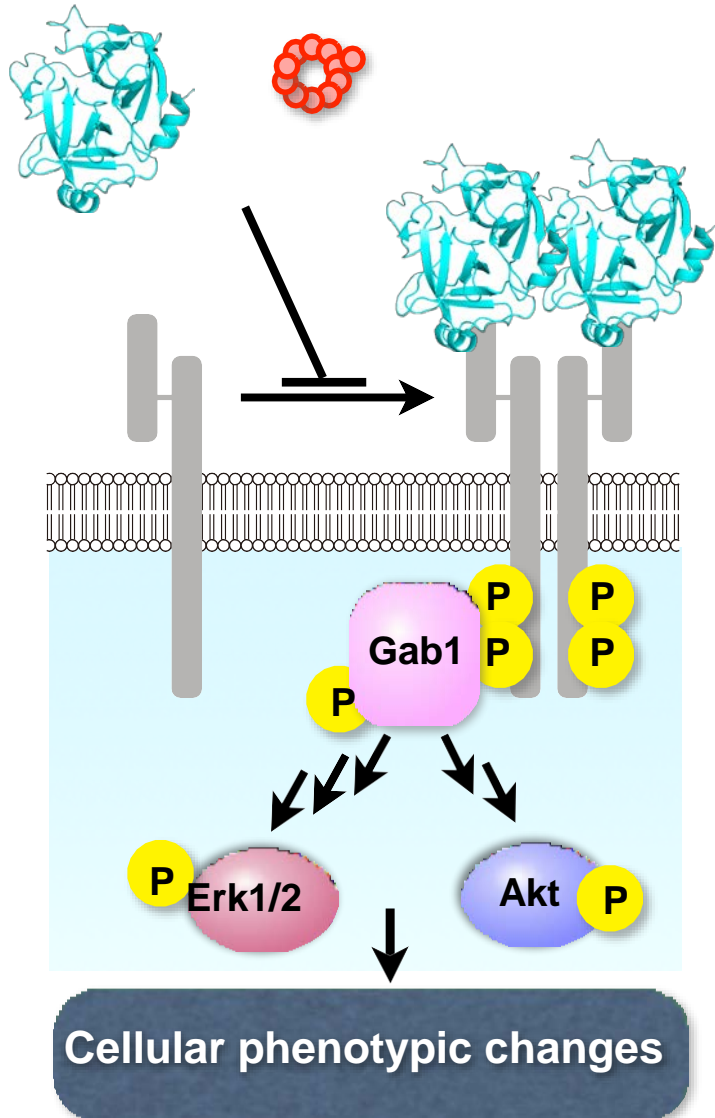
**Unpublished data,  
Collaboration with the  
Nakashima group,  
TMD U.**



# 特殊ペプチドは卵巣欠損マウス動物モデルの骨を回復させる



# HGF ligands for diagnostic and treatment of cancers



- HGF is secreted as a biologically inactive single-chain HGF (scHGF). Proteolytic cleavage of scHGF between the 4th kringle (K4) and serine protease-like (SP) domains generates active two-chain HGF (tcHGF), which can selectively activate the cognate receptor, MET.

- In cancer, pericellular serine proteases expressed in cancerous cells cleave scHGF into tcHGF in tumor microenvironments. Targeting activated HGF is therefore attractive for both diagnosis and treatment of cancers

