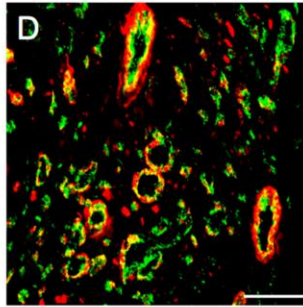
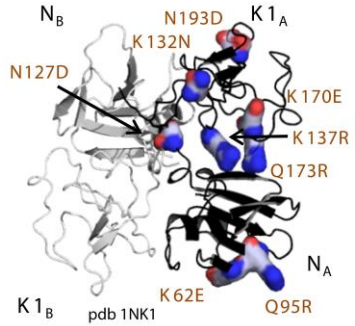




# Cochran Lab @ Stanford: Engineered Proteins for Visualizing and Treating Disease



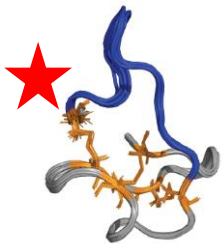
## Engineered ligands for regenerative medicine



- Jones, *Proc Natl Acad Sci*, 2011
- Liu, *FEBS Letters*, 2014
- Sonnenberg, *Biomaterials*, 2014
- Suarez, *ACS Biomaterials*, 2016

Engineered growth factor mimic promotes cardiac tissue regeneration

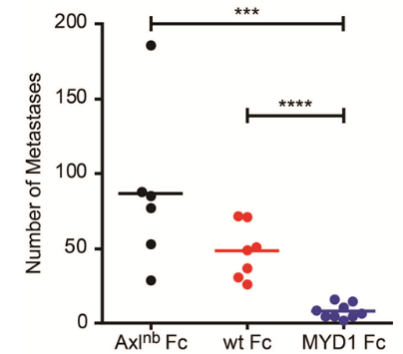
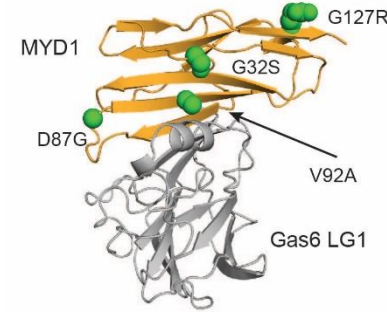
## Engineered peptides inspired by nature as a new class of tumor targeting agents



- Kimura, *Cancer Research*, 2009
- Nielsen, *Cancer Research*, 2011
- Moore, *Proc Natl Acad Sci*, 2013

- Kim, *J. Amer. Chemical Society*, 2015
- Currier, *Mol Cancer Therapeutics*, 2016
- Cox, *Angew Chemie*, 2016

## Engineered proteins as cancer therapeutics



Engineered receptor 'decoy' inhibits 90% of ovarian cancer metastases

Kariolis, *Nature Chemical Biology*, 2014



New tools and technologies for massively paralleled protein analysis and engineering

-- Chen, *Nature Chemical Biology*, 2016