A Remutation to Cauliflower Ear

Authors: Michelle Curtain, Joiel Bauschatz, Julie Hurd, Jill Giggey, and Leah Rae Donahue, Ph.D.

Source of Support: This research was supported by a grant awarded to The Jackson Laboratory by the National Eye Institute titled "Gene Discovery For Craniofacial Disorders" (R01 EY015073- Dr. Leah Rae Donahue, PI).

Mutation (allele) symbol: *cfe-se6J*

Mutation (allele) name: cauliflower ear short ear 6 Jackson

Gene Symbol: *Bmp5*

Source of Origin: BALB/cByJ-*Agtpbp1*$^{pcd\text{-}3J}$/J

Current strain name: BALB/cByJ-*Agtpbp1*$^{pcd\text{-}3J}$-*Bmp5*$^{cfe\text{-}se6J}$/GrsJ

Stock #005348 (jaxstrain.jax.org)

Phenotype Category: craniofacial

Discoverer: Belinda Harris

In July 2004, a remutation to *Bmp5* was discovered. Belinda Harris of the Mouse Mutant Resource at The Jackson Laboratory, discovered a short ear phenotype in mice on the BALB/cByJ-*Agtpbp1*^{pcd3}/J background. Phenodeviants had scalloped edges about their ear pinna similar to the cauliflower remutation to the short ear (*Bmp5*) mutation. An allele test with our "cauliflower ear" strain C.129S7 *Gt(ROSA)26Sor-Bmp5*$^{cfe\text{-}se7J}$/J (Stock #005420), confirmed that this new mutation was a remutation. We demonstrated this by mating a BALB/cByJ-*Agtpbp1*^{pcd} mouse carrying this new mutation to a C.129S7 *Gt(ROSA)26Sor-Bmp5*$^{cfe\text{-}se7J}$/J homozygote. All seven offspring were affected, proving allelism. A live colony is no longer available; sperm has been cryopreserved.