



## Protoporphyrin pathway orthologs

- *hemB*: porphobilinogen synthase
- *hemY*: protoporphyrinogen/coproporphyringoen III oxidase
- *hemD*: UROS-uroporphyringogen-III synthase
- *hemC*: HMBS-hydroxymethylbilane synthase
- *hemA*: glutamyl-tRNA reductase

## Bacteriochlorophyll pathway orthologs

- *bchX*: 3,8-divinyl chlorophyllide a/chlorophyllide a reductase subunit X
- *bchC*: bacteriochlorophyllide a dehydrogenase
- *bchF*: 3-vinyl bacteriochlorophyllide hydratase

- *afsaA/plfA*: A-factor-like-synthase

—| Contig continues

—| Contig edge

—| 2.5kb

—| Ancient

—| Modern