

7. FUTURE WORK

On the whole the objectives of the study were attained but with more time it would have been possible to do much more with the samples and the results obtained raise a series of new questions. Future work which would enhance the present study includes:

- Studies of other molecular markers implicated in mineral homeostasis and in this way potentially involved in skeletal homeostasis, a good candidate is the FGF23.
- Characterize the endocrine system in diploid and triploid fish in order to establish if differences in this system modify homeostasis and explain the morphological differences observed.
- Understand the mechanisms involved in the development and growth of vertebra in both diploid and triploid fish and factors which account for the differences observed.
- Perform other histological study to evaluate similarities and differences between diploids and triploids, hematological studies and immune changes in order to increase understanding about the effect of polyploidy on different biological processes.
- Characterize and validity of using triploids animals as a comparative model and a tool with which to probe the factors which account for the morphological and physiological differences between diploids and triploids.