

## Abstract

**Research Paper:** Reversal of the P53 Gene From Oncogenic to a Normal Functioning Gene

**Student:** Nathan Follis

**Degree:** Master of Arts

**College:** Sciences and Humanities

**Date:** December 2015

**Pages:** 23

This paper will examine *P53*, a gene that can be mutated into an oncogenic form that can cause extensive cellular damage. Such mutations can induce a loss of cell cycle control and promote abnormal cellular growth resulting in tumor formation. The feasibility of mutating P53 back into its original non-oncogenic form will be examined and discussed. Thus, by mutating the oncogenic *P53* gene, it could allow the cell to regain cell cycle control and inhibit further cancerous growth. Genes *P16* and *P21* will also be included in the discussion because of their immense implication in aberrant growth control. P53, if mutated from the cancerous form into the original form, could reverse multiple types of cancer and activate various tumor suppressor genes that have altered function due to a P53 mutation.