

## GENEALOGY DATABASE ENTRY

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Tobias, Cornelius Anthony

1918 -

DEGREE: PhD

DATE: 1943

PLACE: Berkeley

TEACHER/RESEARCH ADVISOR: Segré

helped to develop heavy-ion radiobiology and a way of probing functions of some internal tissues of the body, sometimes called the "atomic knife"; studied the depth-dose patterns caused by accelerated protons and other heavy ions; proposed, with Zirkle, the "migration model" to account for radiation effects on haploid and diploid yeast cells; proposed the "recessive" and "dominant lethal" models for cell lethality; showed that there are two basically different actions of radiation - the effects of light ionization can be modified by oxygen, by chemical compounds, and sometimes by heat, while the effects of heavy ionization are due to cooperative action of several ions and are much less modifiable by external agents.

1. For confirmation of research advisor, see PhD thesis and *Phys. Rev.* **1946**, 70, 89.
2. *McGraw-Hill Modern Men of Science*; McGraw-Hill: 1966; vol. 2, p551-553.