



Francis Peyton Rous 1879-1970

USA

Nobel 1966

Infected chickens from cell-free fluid with cancer:

Rous Sarcoma virus, RSV

Although all cancers originate from viruses
this is a landmark in **molecular genetics**.

Oncogene: a factor causing uncontrollable proliferation of cells.

Retrovirus: reverse transcriptase RNA→DNA

Src gene: cause morphological changes in cells,
encodes a kinase – cell mechanism of signal transduction.

RNA Tertiary structure preventing its degradation.

Virus genome – encode coat proteins,
and protein that help virus penetration into cells.

Electron microscope
RSV image

