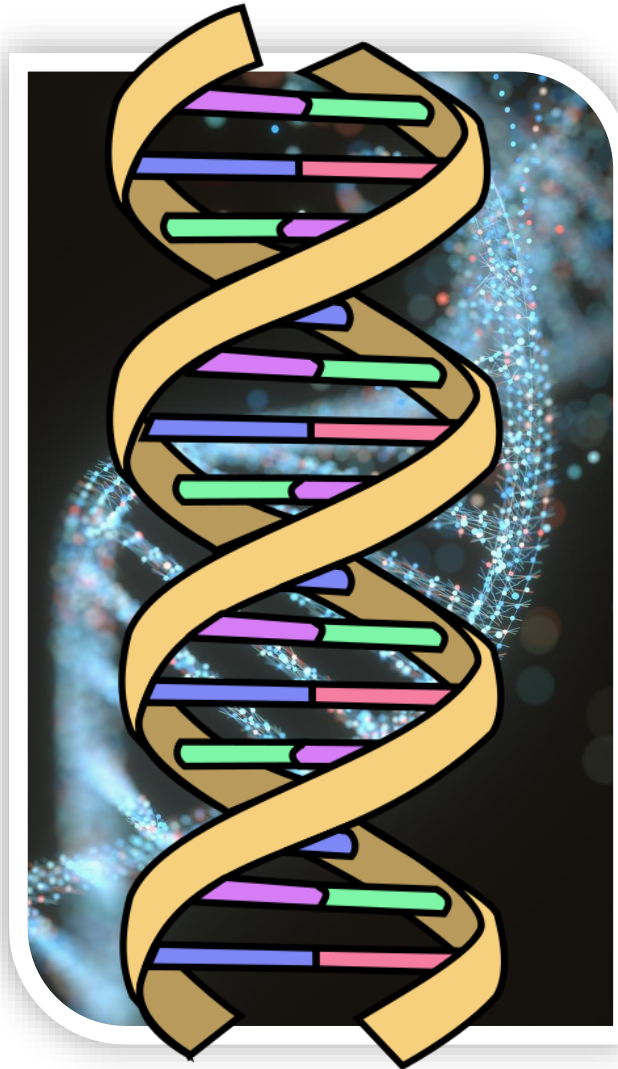







PCR-analysis of direct radiation-  
induced mutations of *white* gene  
in *Drosophilamelanogaster*

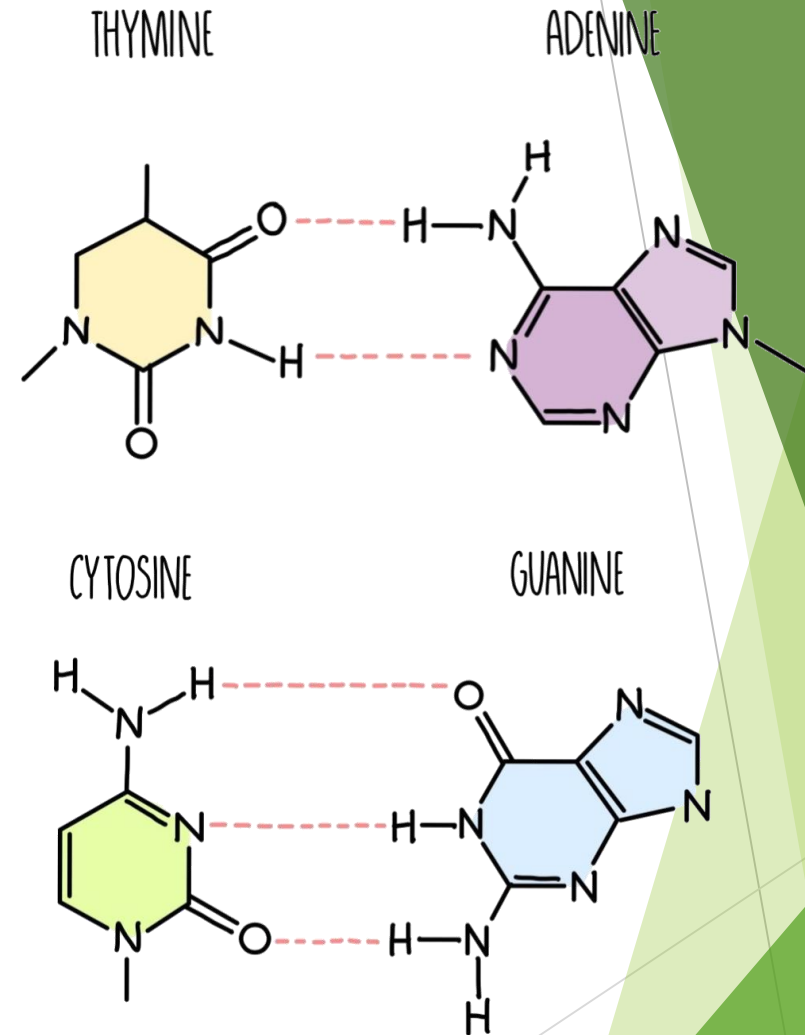
RusakovichA.N., AlexandrovI.D.

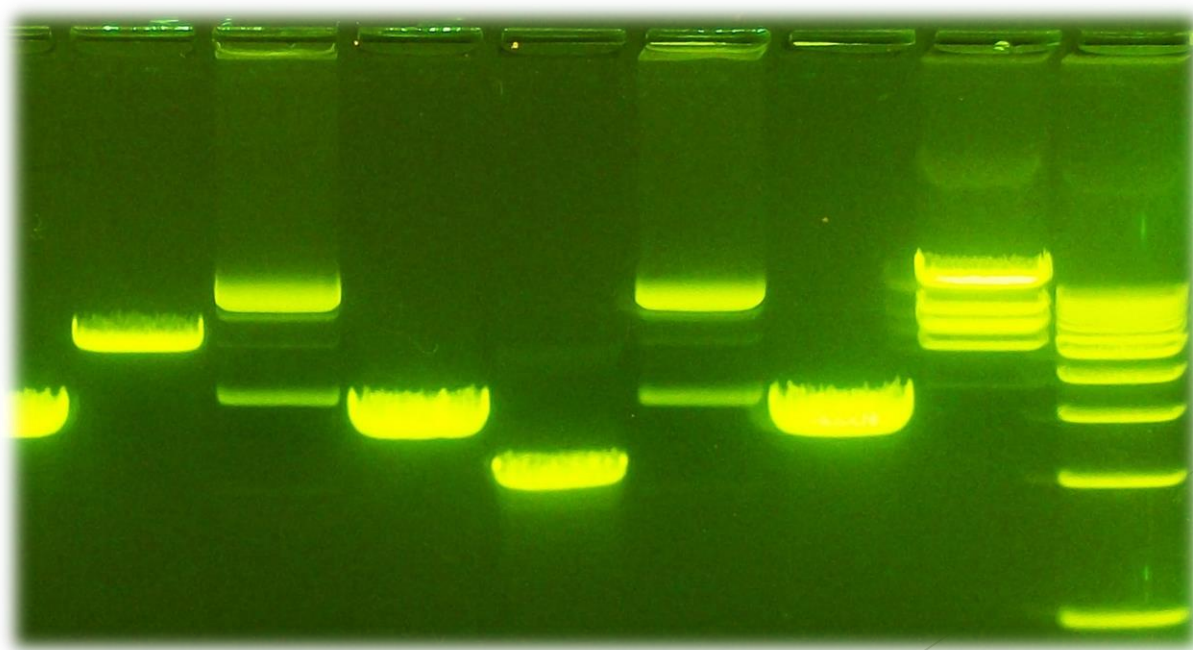
DLNP molecular and radiation genetics group

# Short genetics guide



-  = Adenine
-  = Thymine
-  = Cytosine
-  = Guanine
-  = Phosphate backbone

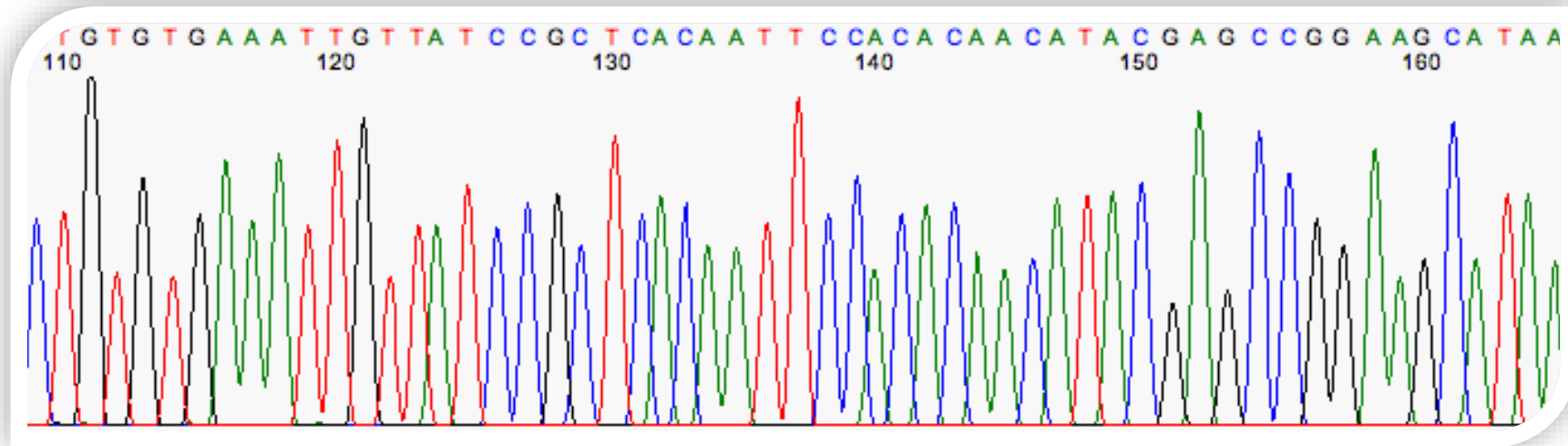




# RESULTS

Mutation type	Gamma-rays (%)	Neutrons (%)
PCR +	82,9	33,3
Loss of single fragment	12,1	33,3
Loss of several neighboring fragments	2,4	26,6
Loss of several non-neighboring fragments	2,4	6,6

# FURTER WORK



```
ATGCC-CA-ATATAA-GGACCTGGCTCAAGGGAGACTGGAGTTTCTAGGGGTCTCTGGGAT-ATGTGGGGCGGTG-GG
--- CCTCAGA-A-AACTGATTTATC-CTTGGGA-A--GG-G--TC-A---GTTTCT----TCAT-TAGGACAATGAAG
GACAGTGCAG-AGACCTTTTCACAGAGCCAAGGAGATAACCCA-GCACCCAGAGAGCAGACG-AATCCACGGG--CT
AAAAATCCAGCTGTCC-CTTC-CA-AG---GGGAGGTA--TCATG-A-GCAG-TATCA-AGGTAA-GCAAGGGAAC-
CT-GTGTGGGAGTGAGGGAGGCCTTCCC GGCTTTACATCCAGGTGCACCTGAGCCCCGATCCCCCATGAGTCTGTCT
CTGGT-TT GGAATCCTGGTTGAC--ACGGGCTTTCACTTTAAG----A----AG-----T--CGCAAGAGACTGCCG
CAGGA-AGTAAATGGCA-AAAGCGCTAAGTAGATAACCCCAGAGGAGGAGGAGAATTCTG--AATTCTGTT-TATAGC
CAAGAGAGGAA--GCCACAGA-C-C-AGGTTG-GA--CCCTGAG--CCTGGAG--TACTGCCTTTTCTCTTCT-TTGC
```

# THANK YOU FOR YOUR ATTENTION!

► Contacts:

Artem Rusakovich

Email: [arusakovich@jinr.ru](mailto:arusakovich@jinr.ru)

Telegram: [https://t.me/a\\_rusakovich](https://t.me/a_rusakovich)