


PCR

Reação em Cadeia da Polimerase

(ou Reação da Polimerase em Cadeia...)

Felipe R. Da Silva



Anelamento

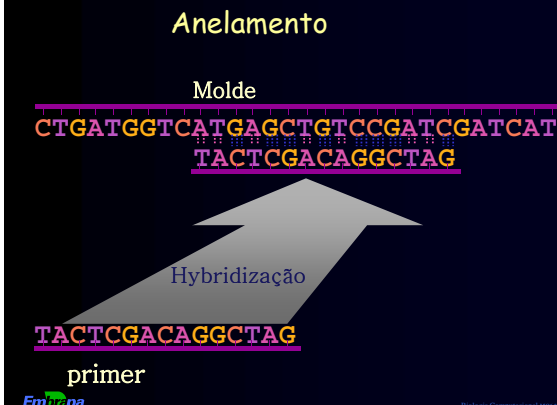

Molde

CTGATGGTCATGAGCTGTCCGATCGATCAT
TACTCGACAGGCTAG

Hybridização



primer

TACTCGACAGGCTAG

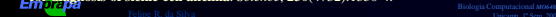
Kary B. Mullis (1983)

Nobel de Química, 1993

Mullis, K.B (1983). The unusual origin of the polymerase chain reaction. *Sci Am*, 4: 56-65.

Saiki R. K.; Scharf S; Faloona F; Mullis K. B; Horn G. T; Erlich H. A.; Arnheim N. (1985). Enzymatic amplification of beta-globin genomic sequences and restriction site analysis for diagnosis of sickle cell anemia. *Science*, 230(4732):1350-4.




Ciclo 1

96°C DNA original = 1 Cópia original = 0 Cópia delimitada = 0 1

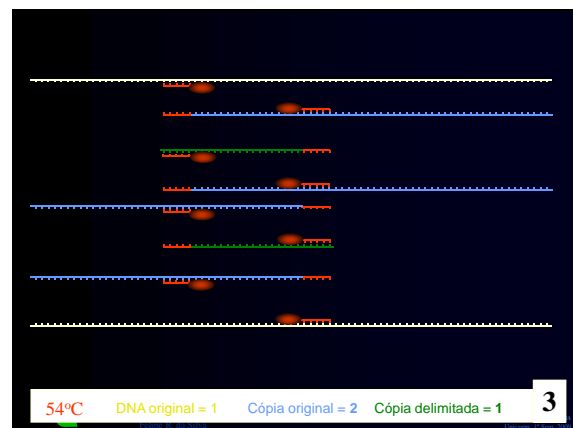
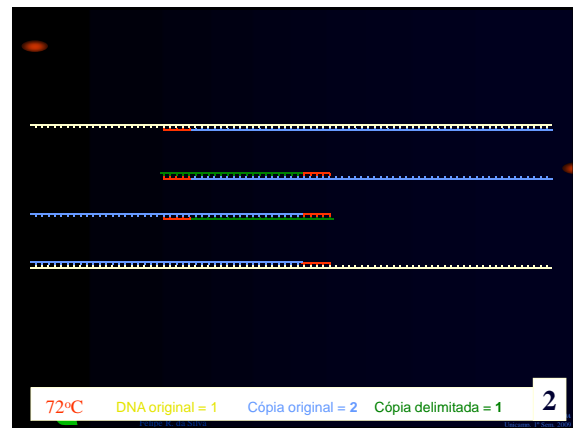
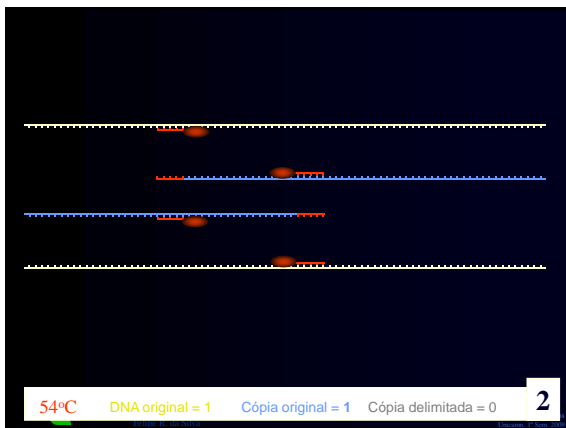
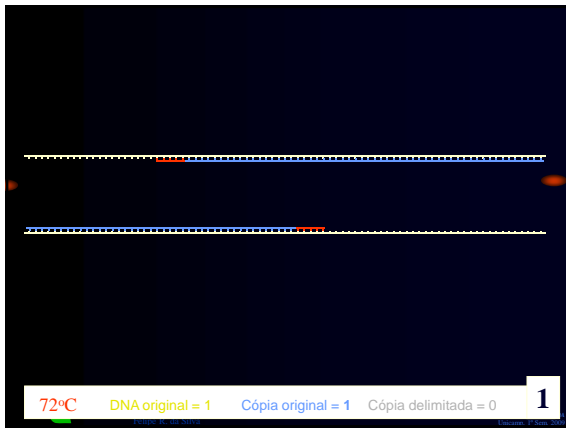


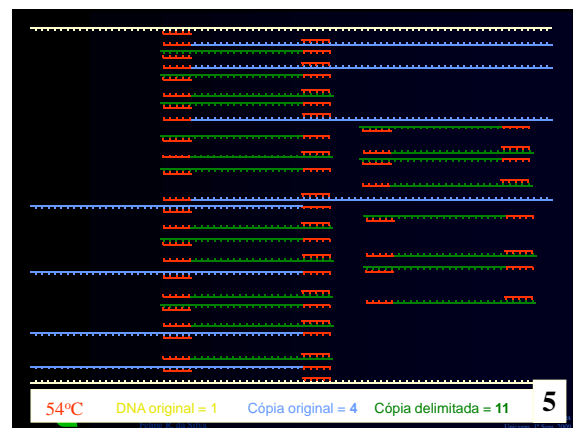
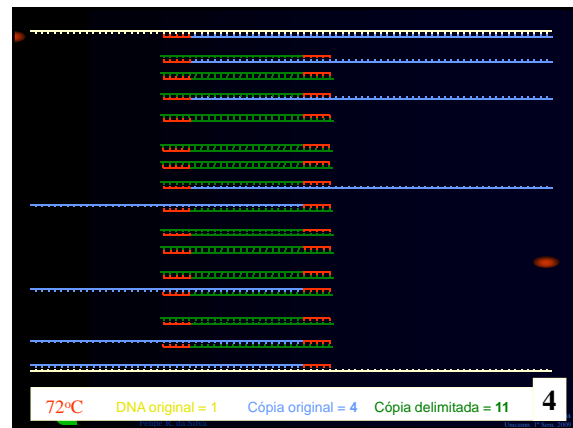
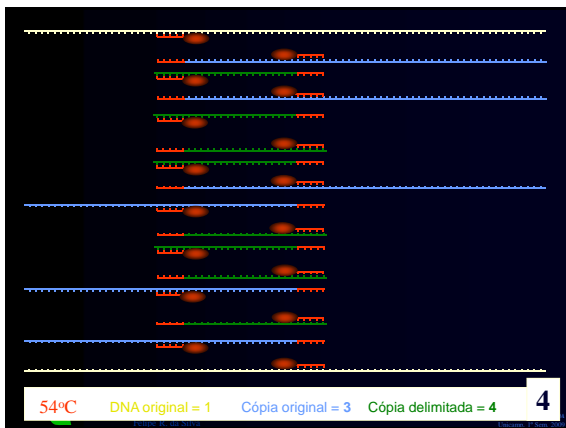
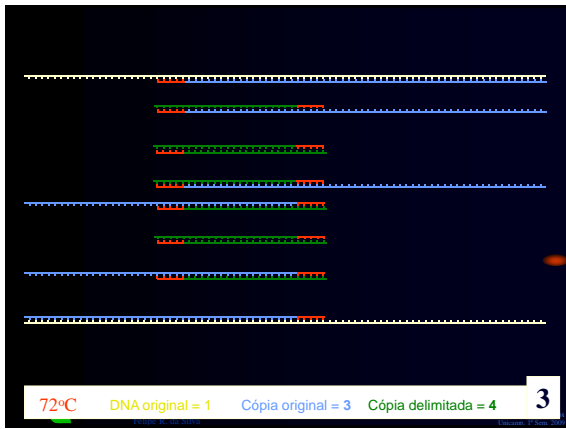

97°C DNA original = 1 Cópia original = 0 Cópia delimitada = 0 1

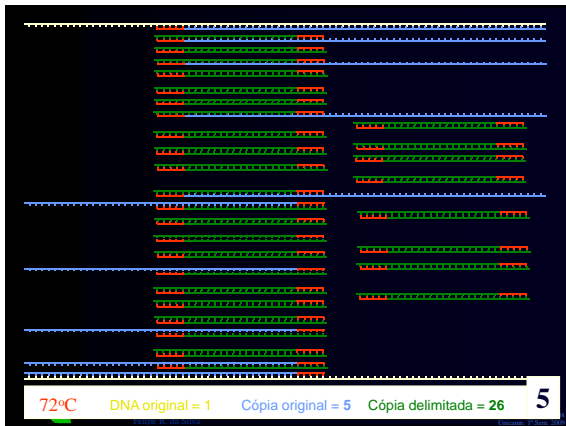



54°C DNA original = 1 Cópia original = 0 Cópia delimitada = 0 1







Ciclo	Cópia delimitada
1	0
2	1
3	4
4	11
5	26
6	57
7	120
10	1.013
20	1.048.555
30	1.073.741.793
35	34.359.738.332
40	1.099.511.627.735
50	1.125.899.906.842.570

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