



Northwestern University Feinberg School of Medicine

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**My how far we've come...**  
but look how far we can go

**Platform partition in translational medicine data**

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Pamela Shaw, MSLIS, MSCBB  
Galter Health Sciences Library



NORTHWESTERN  
UNIVERSITY



# “When I was in high school...”

## THE STRUCTURE OF DNA

J. D. WATSON<sup>1</sup> AND F. H. C. CRICK

Cavendish Laboratory, Cambridge, England  
(Contribution to the Discussion of Provirus.)

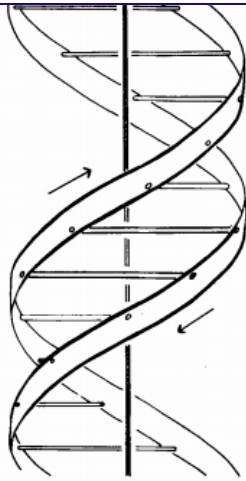


FIGURE 4. This figure is diagrammatic. The two ribbons symbolize the two phosphate-sugar chains and the horizontal rods. The paths of bases holding the chain together. The vertical line marks the fiber axis.

## GENETICAL IMPLICATIONS OF THE STRUCTURE OF DEOXYRIBONUCLEIC ACID

By J. D. WATSON and F. H. C. CRICK

Medical Research Council Unit for the Study of the  
Molecular Structure of Biological Systems, Cavendish  
Laboratory, Cambridge

Watson JD, Crick FH. The structure of DNA. *Cold Spring Harb Symp Quant Biol.* 1953;18:123-31

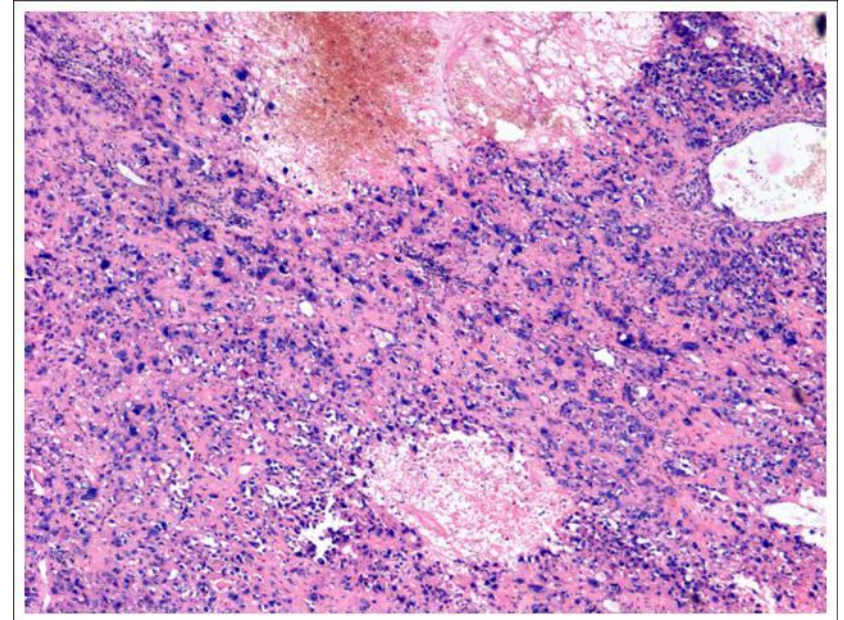
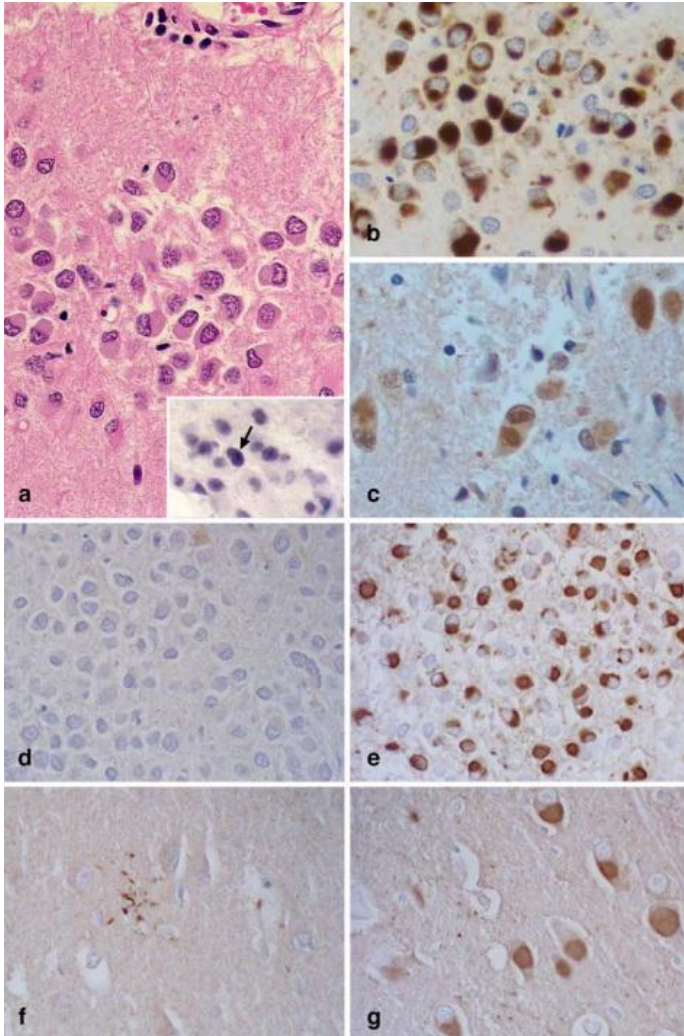
Watson JD, Crick FH. Genetical implications of the structure of deoxyribonucleic acid. *Nature.* 1953;171(4361):964-7



# “Intrinsic gene expression profiles of gliomas are a better predictor of survival than histology”

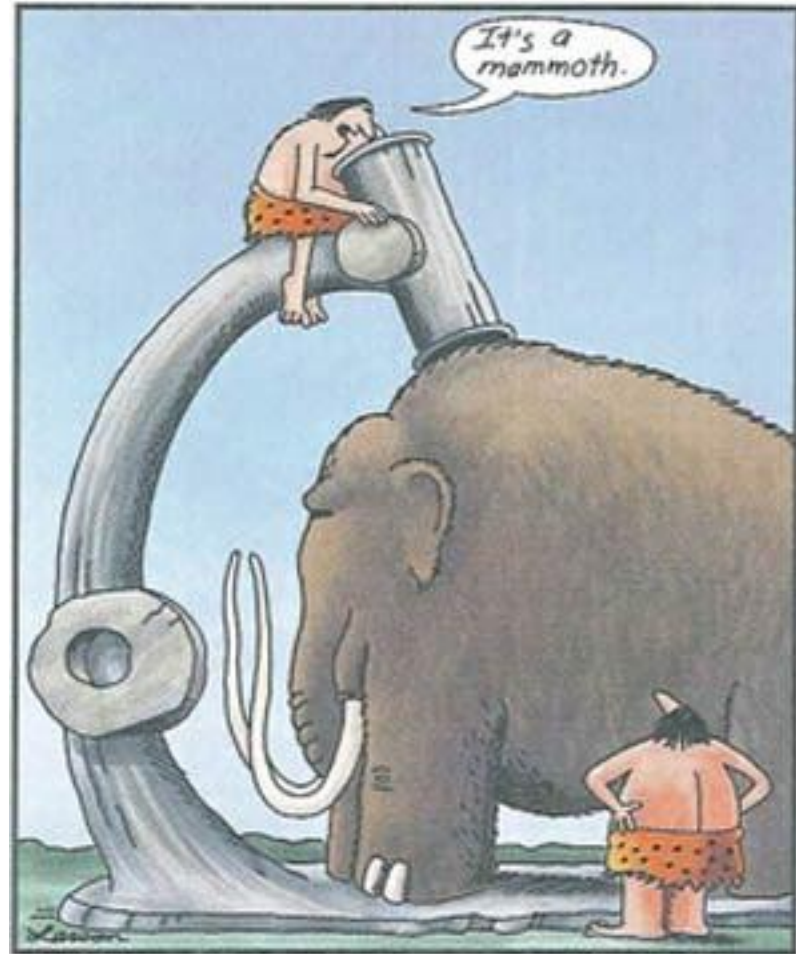
Gravendeel LA, Kouwenhoven MC, Gevaert O, de Rooi JJ, Stubbs AP, Duijm JE, et al. Intrinsic gene expression profiles of gliomas are a better predictor of survival than histology. *Cancer Res.* 2009;69(23):9065-72

# When I was a lab tech...



Hogg M, Grujic ZM, Baker M, Demirci S, Guillozet AL, Sweet AP, et al. The L266V tau mutation is associated with frontotemporal dementia and Pick-like 3R and 4R tauopathy. *Acta Neuropathol (Berl)*. 2003;106(4):323-36  
<http://myhealth-guide.org/glioblastoma-multiforme-pathology-and-pictures/613>

**That was the  
past (or is it  
the present?)**



Early microscope



# It's getting better

- EDW
  - Pharmacoepidemiology
- NUGene
  - DNA samples linked to EHR records
- eMERGE network



## NUCATS

Northwestern University Clinical and Translational Sciences Institute



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[www.nucats.northwestern.edu](http://www.nucats.northwestern.edu)

EVERYONE'S FUTURE.



# It's getting better

- Still have platform separation
- DNA, blood and tissue samples not always matched to medical records
- Issues with data privacy?



<http://www.projectmanage.com/your-project-management-career/>



# It seems hard, but look at the view!

- Connect users to data to computing resources
- Who else can do that better?



<http://mountainsandmountaineers.blog.com/2012/07/20/exercises-to-do-before-going-mountain-climbing/>





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# Thank you!

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- AAAS
- Science Translational Medicine
- Kiki Forsythe & Minah Kim
- Fellow panelists
- Attendees
- Chuck's