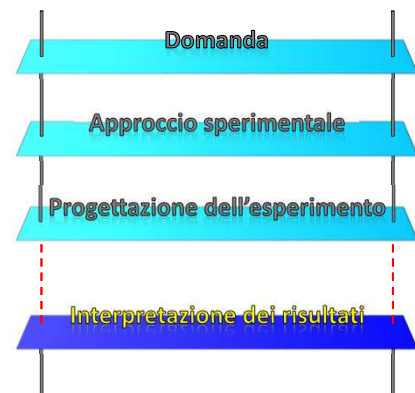
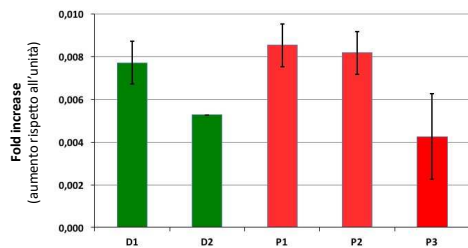


Interpretazione dei risultati

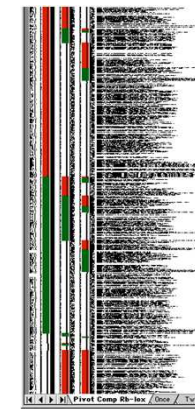


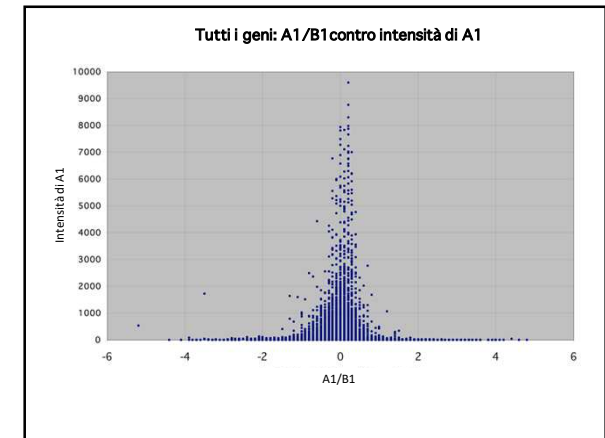
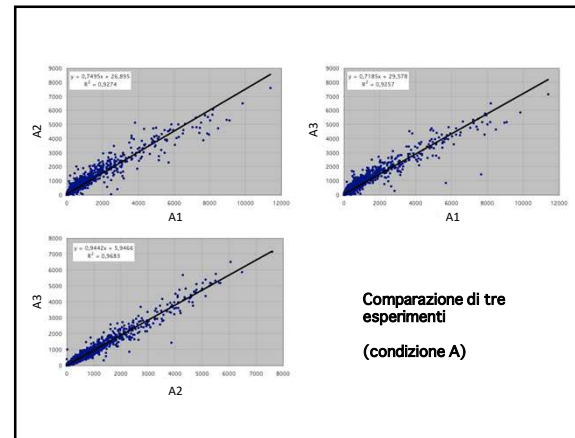
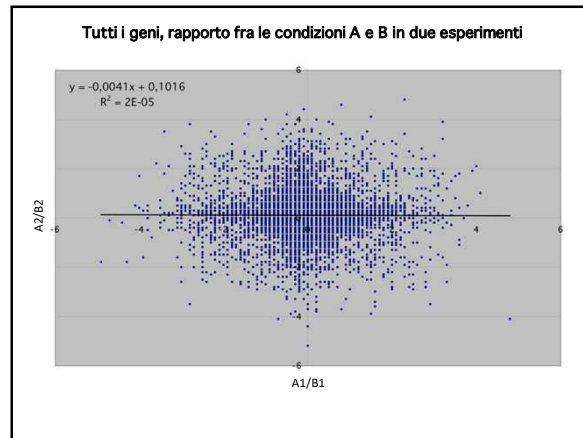
Un esperimento genera risposte,
sotto forma di dati qualitativi o quantitativi

I dati non parlano da soli, vanno analizzati



ID	A	Prot Data										Description	E	K	H
		On a Signal	On a Defect	Defect	p-value	On a Signal	On a Defect	Defect	p-value						
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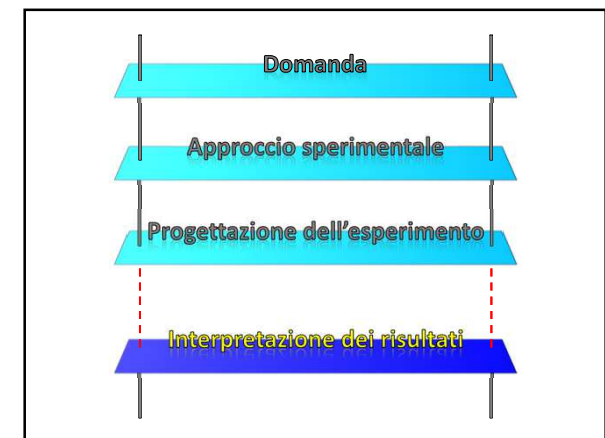
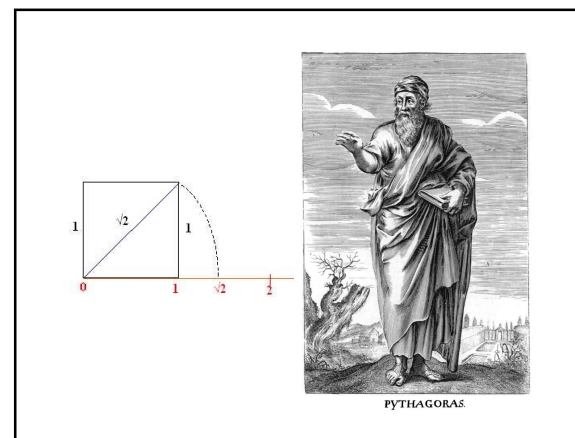




Un esperimento genera risposte,
sotto forma di dati qualitativi o quantitativi

I dati non parlano da soli, vanno analizzati

Non sempre le risposte sono gradite
Ma un esperimento valido ci dice sempre qualcosa



Dati
↓
Risultati
↓
Conclusioni

Le conclusioni non sono mai univoche

A pRb-independent mechanism preserves the postmitotic state in terminally differentiated skeletal muscle cells

J. of Cell Biology 167:417-423, 2004

Published Online: 31 December, 2007 | Page Info: <http://dx.doi.org/10.1083/jcb.200708051>
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JCB | ARTICLE

Retinoblastoma tumor suppressor protein-dependent methylation of histone H3 lysine 27 is associated with irreversible cell cycle exit

Alexandre Blais,¹ Chris J. C. van Oevelen,² Raphaël Margueron,² Diego Acosta-Alvear,² and Brian David Dynlacht²

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The retinoblastoma tumor suppressor protein (pRb) is involved in mitotic exit, promoting the arrest of myoblasts, and myogenic differentiation. However, it is unclear how permanent cell cycle exit is maintained in differentiated muscle. Using RNA interference, expression profiling, and chromatin immunoprecipitations, we show that pRb is essential for cell cycle exit and the differentiation of myoblasts and is also uniquely required to maintain this arrest in myotubes. Remarkably, we also uncover a function for the pRb-related proteins p107 and p130 as

enforcers of a G2/M phase checkpoint that prevents progression into mitosis in cells that have lost pRb. We further demonstrate that pRb effects permanent cell cycle exit in part by maintaining trimethylation of histone H3 lysine 27 (H3K27) on cell cycle genes. H3K27 trimethylation silences other genes, including *Cyclin D1*, in a pRb-independent but polycomb-dependent manner. Thus, our data distinguish two distinct chromatin-based regulatory mechanisms that lead to terminal differentiation.

Cell

Article

SIRT6 Is Responsible for More Efficient DNA Double-Strand Break Repair in Long-Lived Species

Xiao Tian,¹ Denis Firsanov,¹ Zhihui Zhang,¹ Yang Cheng,² Lingfeng Luo,¹ Gregory Tomblin,¹ Ruiyue Tan,¹ Matthew Simon,¹ Steven Henderson,¹ Janine Steffan,¹ Audrey Goldfarb,¹ Jonathan Tam,¹ Kitty Zheng,¹ Adam Cornwell,¹ Adam Johnson,¹ Jiang-Nan Yang,¹ Zhiyong Mao,¹ Bruno Martin,¹ Weiwei Dang,² Zhengdong Zhang,¹ Jan Vijg,¹ Aaron Wolfe,³ Kelsey Moody,³ Brian K. Kennedy,^{1,4} Dirk Bohmann,⁵ Vadim N. Gladyshev,⁶ Andrei Seluanov,^{1,6} and Vera Gorbunova^{1,1*}

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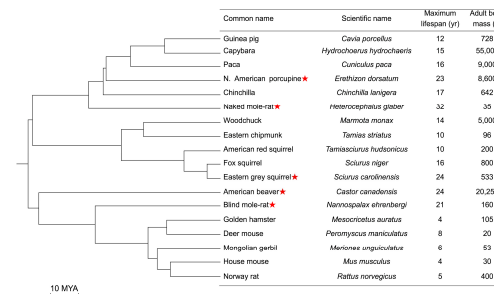
⁹Departments of Biochemistry and Physiology, National University Singapore, Singapore

¹⁰Centre for Healthy Aging, National University Health System, Singapore

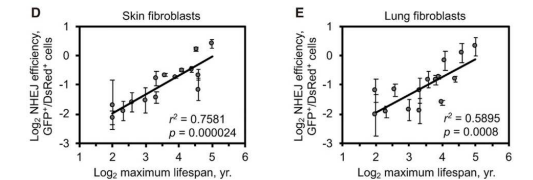
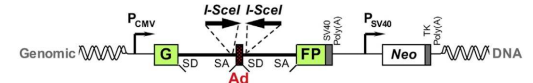
*Correspondence: andrei.seluanov@rochester.edu (A.S.), vera.gorbunova@rochester.edu (V.G.)

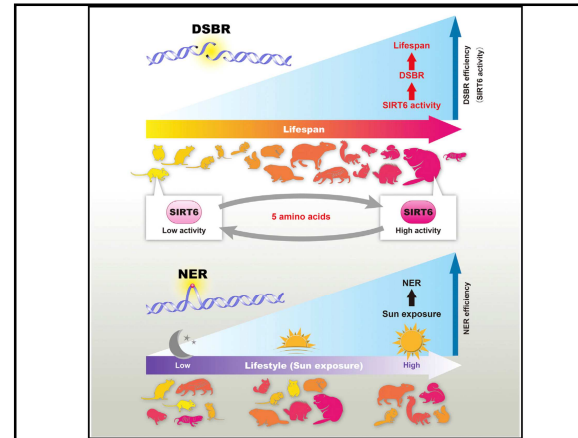
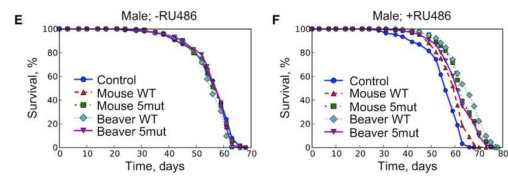
¹¹Lead Contact
<https://doi.org/10.1016/j.cell.2019.03.043>

Cell 177, 622-638, April 18, 2019



A NonHomologous End Joining (NHEJ) Reporter





Dati
↓
Risultati
↓
Conclusioni

Le conclusioni non sono mai univoche

Dalle conclusioni di un lavoro di ricerca scaturiscono nuove domande

Punti notevoli

- La progettazione puntuale degli esperimenti segue l'identificazione dell'approccio sperimentale
- I dati grezzi devono essere tradotti in risultati
- Dai risultati si traggono delle conclusioni
- Un buon esperimento cerca sempre di dirci qualcosa, anche se non lo capiamo
- Un risultato valido non deve essere ignorato