

Nucleo-cytoskeletal interactions in the mechanical functioning of the cell

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Propositions

Belonging to the thesis:

“Nucleo-cytoskeletal interactions in the mechanical functioning of the cell”

by

Frederik Houben

1. The loss of lamins affects the cytoskeletal network of the cell, causing functional defects in nuclear orientation and cellular migration.
This thesis
2. The loss of lamins causes hypermobility of telomeres.
This thesis
3. The reversible rupture of the nuclear membrane in cells of laminopathy patients and the resulting loss of compartmentalization integrates the mechanical and gene regulatory hypotheses as possible explanations for the development of laminopathies.
This thesis
4. Cytoplasmic PML bodies can be used as a diagnostic tool for laminopathies.
This thesis
5. The current trend to quantify biological events leads to statistically significant results, which do not necessarily have biological significance.
Johnson D.H., Journal of Wildlife Management, 1999, Vol 63(3), p763-772
6. Myopathies induced by the prescription of statins may result from their effects on lamin processing.
Arora R. et al., Journal of Cardiovascular Pharmacology and Therapeutics, 2006, Vol 11(2), p105-112
7. International adoption has to be the exception, never the rule.
The Hague Adoption Convention, 1993
8. Playwrights or their heirs should not impose limitations upon the production, performance and staging of their play.
Billington M., The Guardian, February 4th 2006

Maastricht, December 20, 2011

Stellingen

Behorende bij het proefschrift:

“Nucleo-cytoskeletal interactions in the mechanical functioning of the cell”

van

Frederik Houben

1. Het verlies van lamines heeft een effect op het cytoskelet en leidt tot functionele defecten van kernoriëntatie en celmigratie.
Dit proefschrift
2. Het verlies van lamines veroorzaakt hypermobiliteit van telomeren.
Dit proefschrift
3. De reversibele kernmembraan-ruptuur van cellen van laminopathie patiënten en het bijhorende verlies van compartimentalisatie integreert de mechanische en genregulerende hypothese als mogelijke verklaringen van de ontwikkeling van laminopathieën.
Dit proefschrift
4. Cytoplasmatische PML lichaampjes kunnen gebruikt worden als diagnostisch hulpmiddel voor laminopathieën.
Dit proefschrift
5. De huidige trend om biologische gebeurtenissen te kwantificeren leidt tot statistisch significante resultaten, die niet noodzakelijk biologisch significant zijn.
Johnson D.H., Journal of Wildlife Management, 1999, Vol 63(3), p763-772
6. Myopathieën, geïnduceerd door het gebruik van statines, kunnen veroorzaakt worden door hun effect op het maturatieproces van lamines.
Arora et al., Journal of Cardiovascular Pharmacology and Therapeutics, 2006, Vol 11(2), p105-112
7. Internationale adoptie moet de uitzondering zijn, niet de regel.
The Hague Adoption Convention, 1993
8. Toneelschrijvers en hun erfgenamen zouden geen beperkingen mogen opleggen omtrent de manier waarop hun toneelstukken opgevoerd worden
Billington M., The Guardian, 4 februari 2006

Maastricht, 20 December, 2011