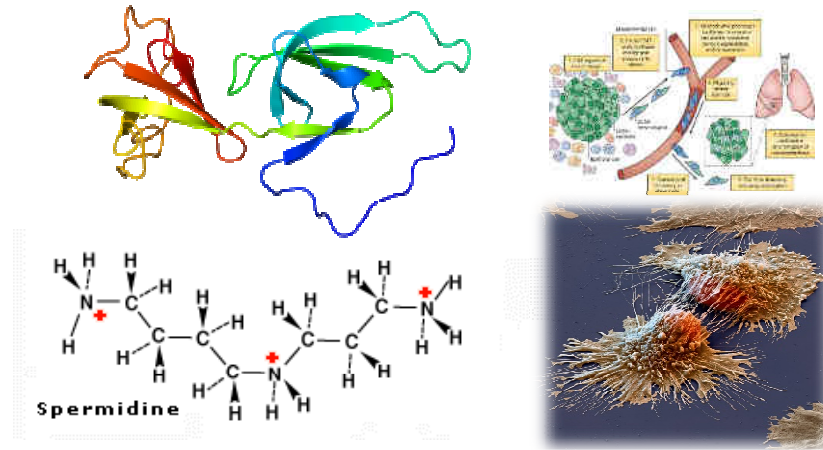


Polyamines, eIF5A, EMT and cancer: a promising relationship



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V Meeting of PhD Students at UPV

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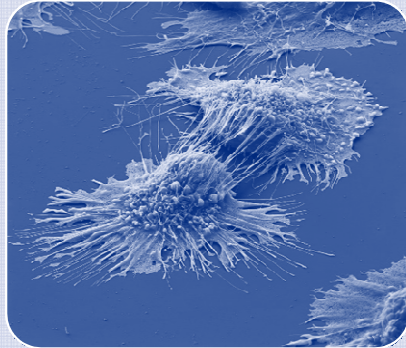


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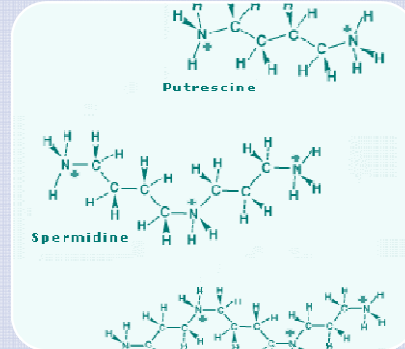
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Cancer



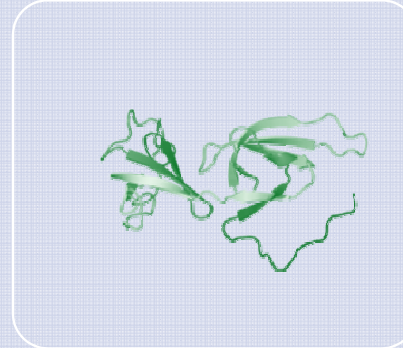
Selective growth and proliferative advantage are hallmarks of cancer cells

Polyamines



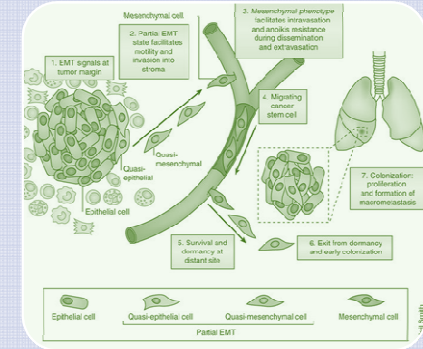
Metabolic products which are central for proliferation. “Oil for the cancer engine”

eIF5A



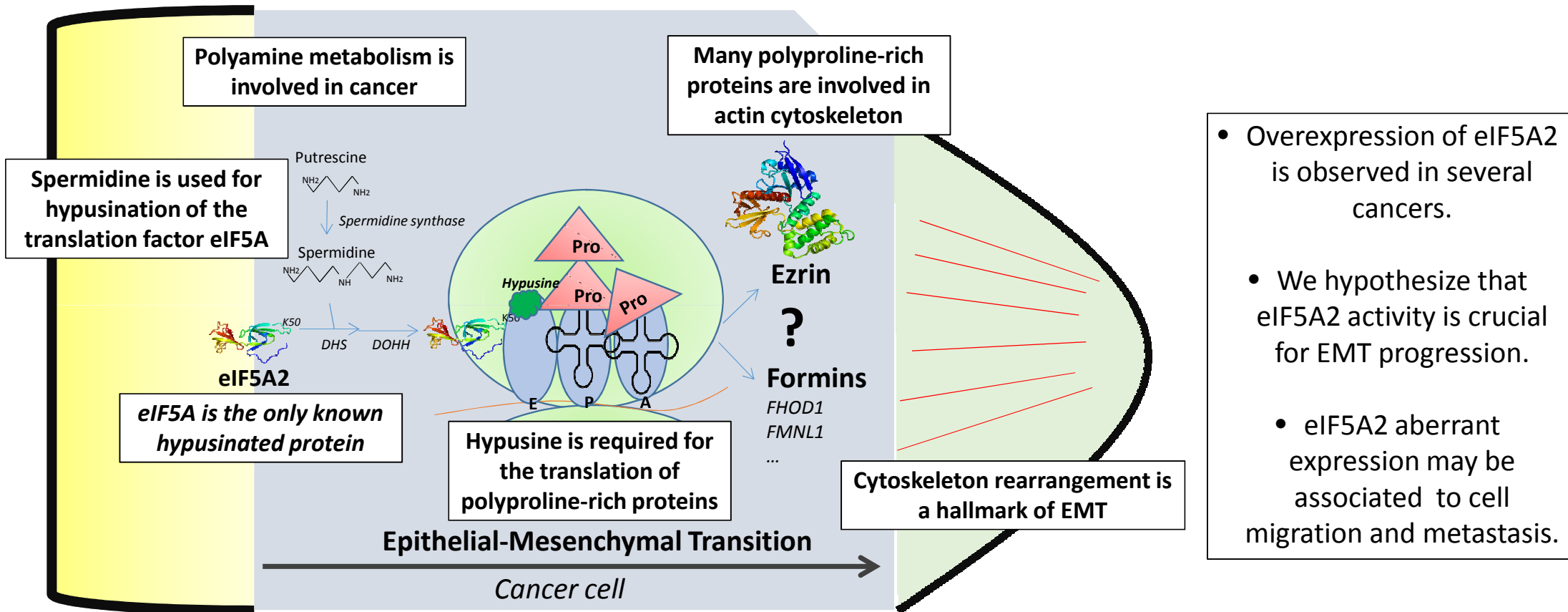
Translation factor which undergoes a unique post-translation modification called hypusination. Hypusine is a derivative of the polyamines

Epithelial to Mesenchymal Transition (EMT)



Phenotypical changes essential for cancer progression: loss of cell polarity, cytoskeleton reorganization, increase of motility

Outline of the main hypothesis and questions to address

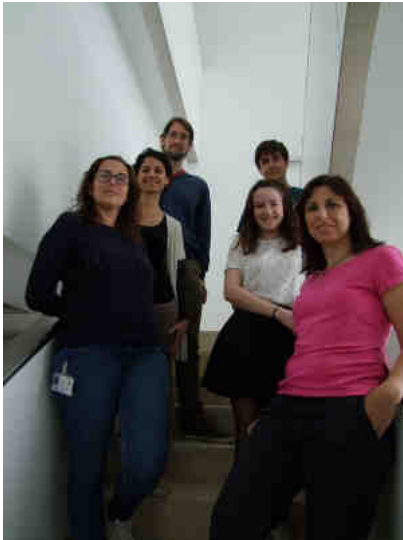


- Overexpression of eIF5A2 is observed in several cancers.
- We hypothesize that eIF5A2 activity is crucial for EMT progression.
- eIF5A2 aberrant expression may be associated to cell migration and metastasis.

Hypusine could be a promising novel target for cancer therapies

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