

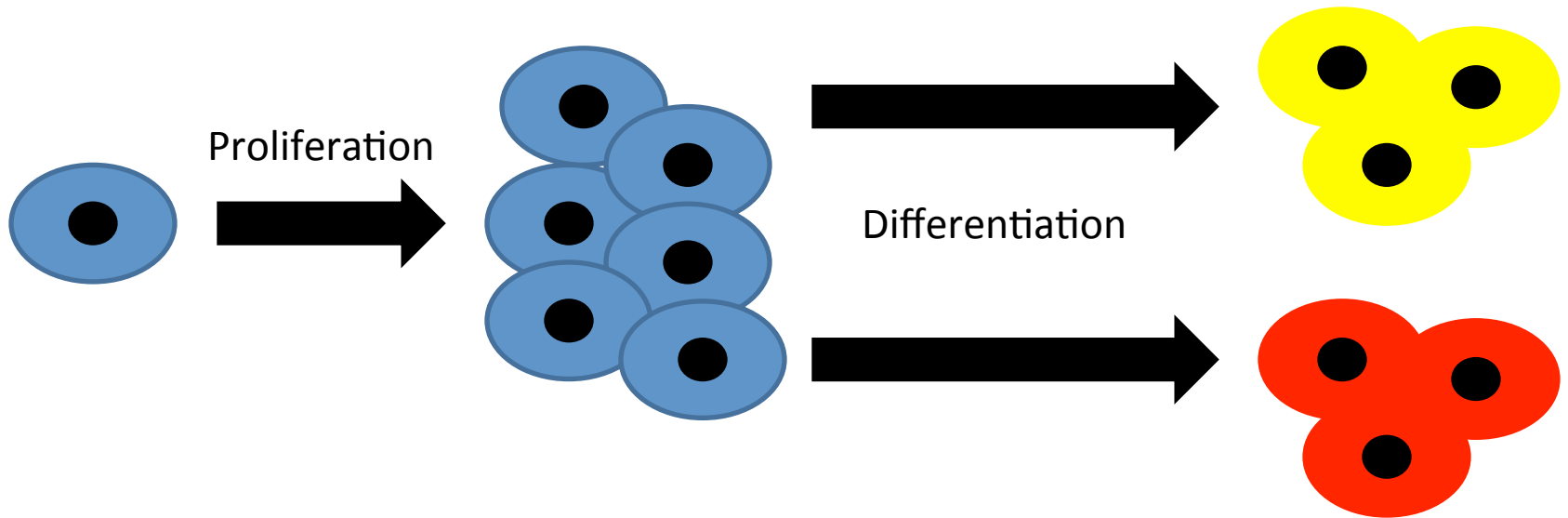


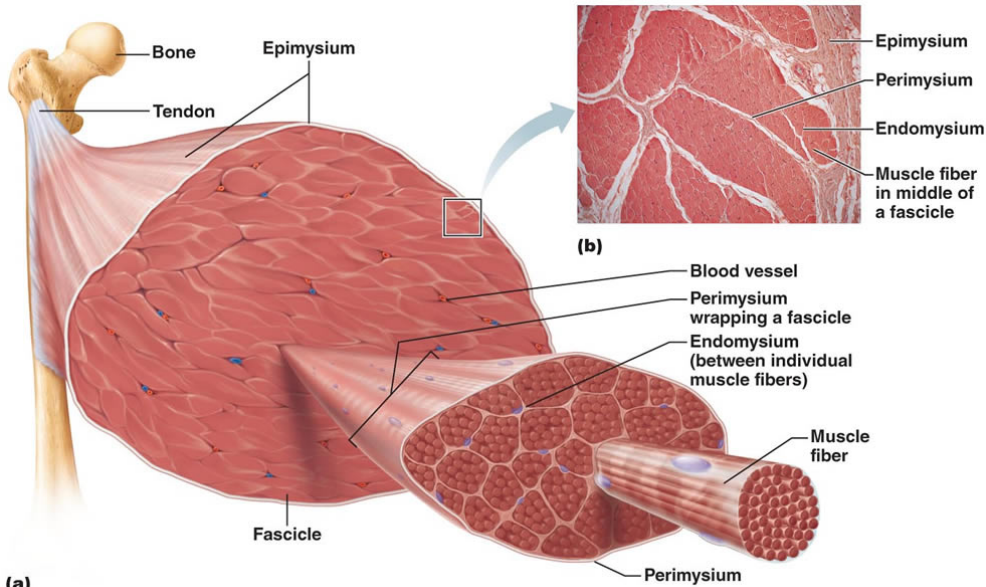
A novel therapeutic option for myotonic dystrophy

Yao Yao

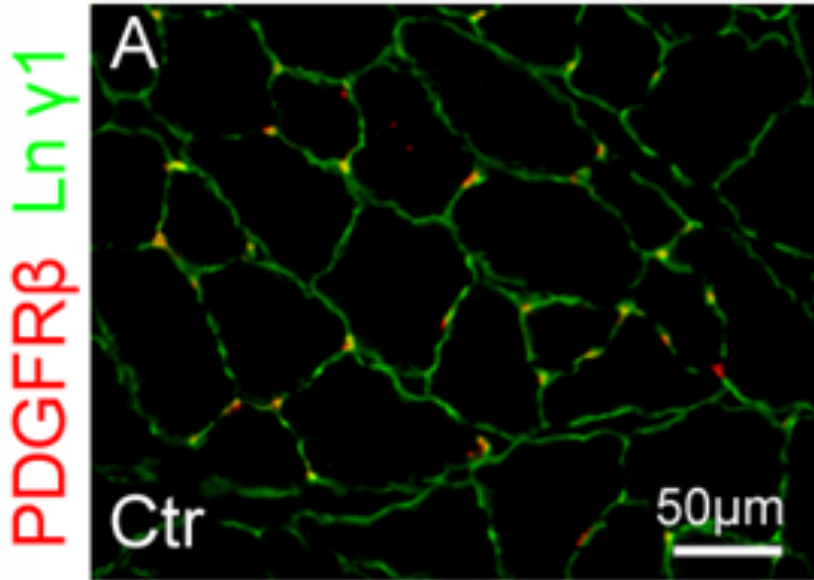
Sep. 12, 2014

Stem cell-based therapies





(a)
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Pericytes

- Mesenchymal stem cells

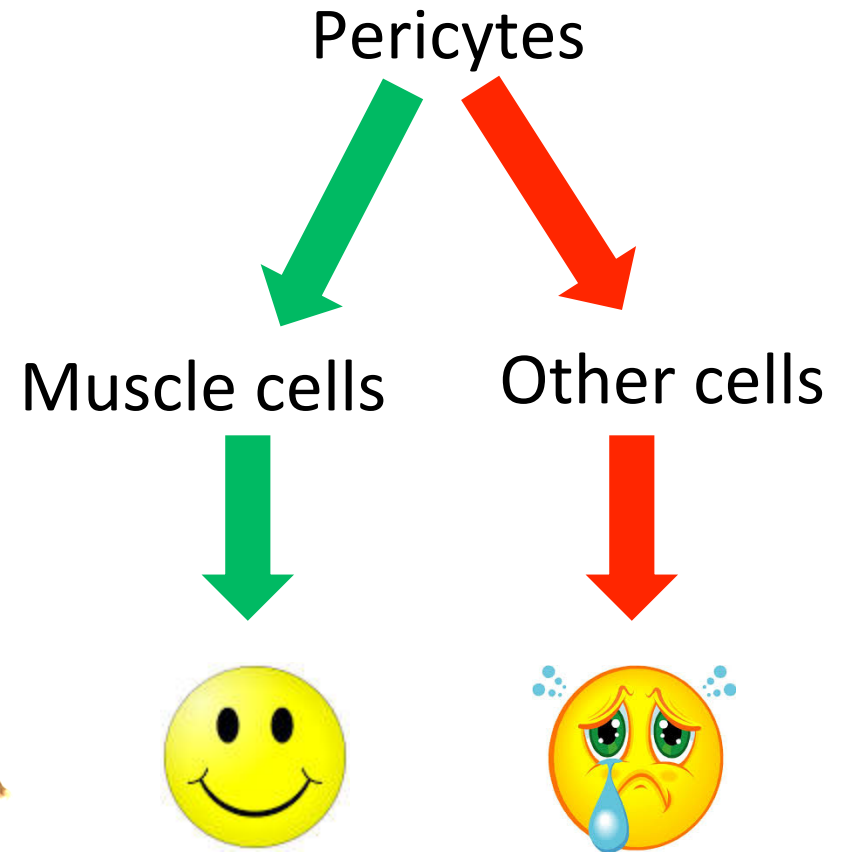
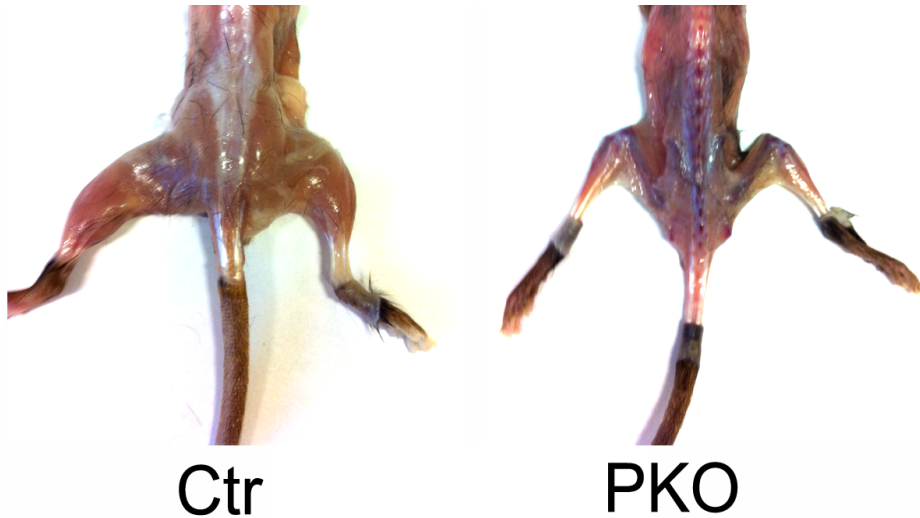
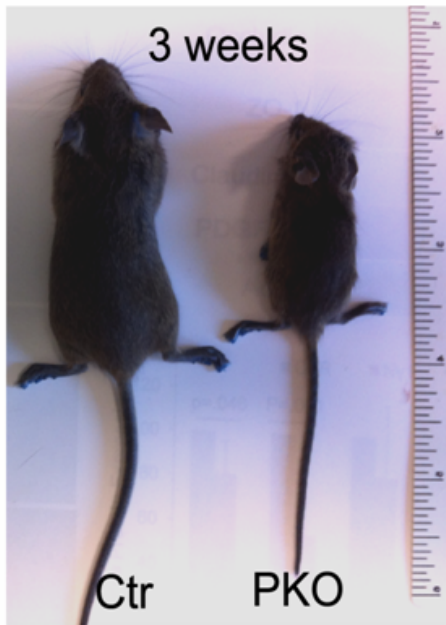
Pericytes

Muscle cells

Other cells



Laminin-deficient mice (PKO)



Laminin-deficient mice (PKO)

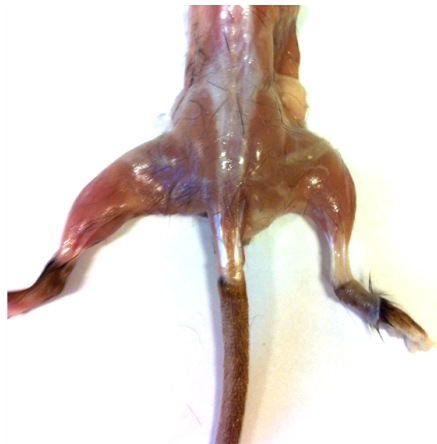


With Laminin

Pericytes

Muscle cells

Other cells



Ctr

PKO

Laminin-deficient mice (PKO)

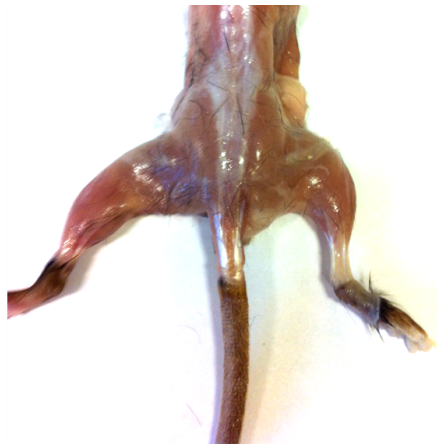


Without Laminin

Pericytes

Muscle cells

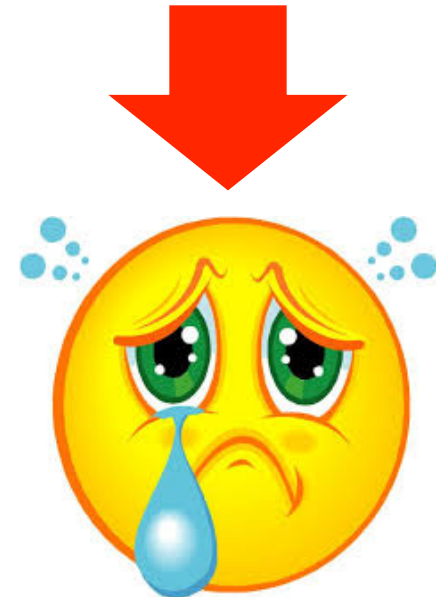
Other cells



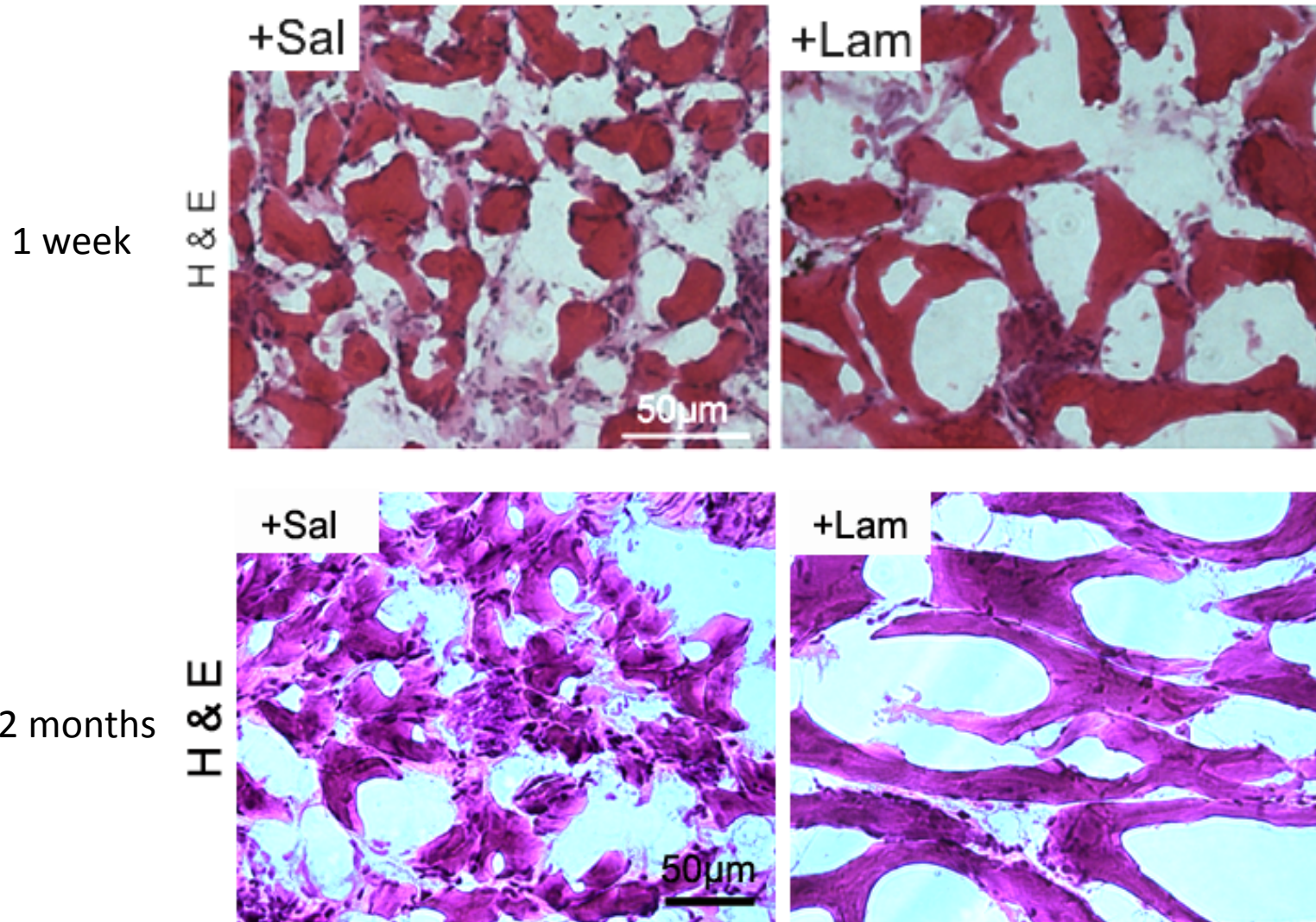
Ctr



PKO



Laminin partially rescues the MD phenotype

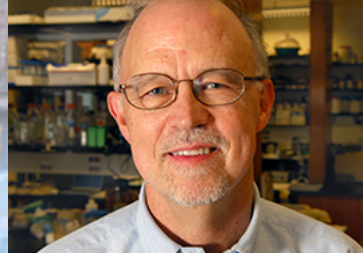


Future work

- ➔ Laminin-based therapy
 - ❖ Laminin partially rescue the PKO phenotype
- ➔ Pericyte-based therapy
 - ❖ Engineered pericytes committed to muscle cell differentiation
- ➔ High-throughput screening
 - ❖ Promote the generation of muscle cells
 - ❖ Prevent the generation of other cells

Acknowledgements

Dr. Sidney Strickland



The Strickland Lab Members

Funding:

Merck Postdoctoral Fellowship
MDF Fund-A-Fellow Grant
BD Biosciences Stem Cell Grant

Collaborators:

Dr. Giulio Cossu (Univ. of Manchester, UK)
Dr. Christer Betsholtz (Uppsala Univ., Sweden)
Dr. Christopher Mason (Weill Cornell Medical College, USA)
Dr. Volkhard Lindner (Maine Medical Center, USA)