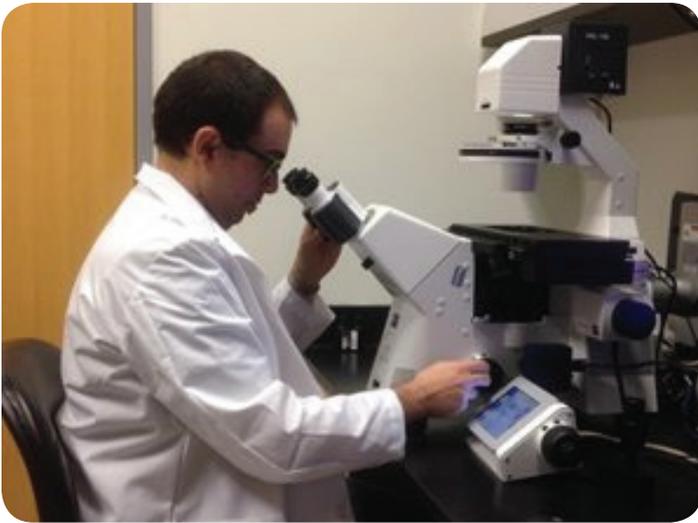


Glucocorticoids in Fiber Repair and Regeneration of Dystrophic Muscles

Development grant jointly funded by the AANEM Foundation and the Muscular Dystrophy Association (MDA) was awarded in 2017 to fund the following project.



Mattia Quattrocchi, PhD

Glucocorticoids in Fiber Repair and Regeneration of Dystrophic Muscles

Mattia Quattrocchi, PhD
Center for Genetic Medicine, Northwestern University, Chicago, IL

A development grant jointly funded by the AANEM Foundation and the MDA was awarded to Mattia Quattrocchi, a postdoctoral fellow at Center for Genetic Medicine, Northwestern University, Chicago, IL. Dr. Quattrocchi was awarded \$180,000 over three years.

Dr. Quattrocchi shared his thoughts on his research and this award:

- **What spurred your interest in this type of research?**

Muscular dystrophies are still incurable diseases, chronically undermining our everyday abilities like walking, or even breathing. At present, chronic dosing of glucocorticoid steroids is the only pharmacological treatment in use, and it is indicated only for patients with Duchenne muscular dystrophy, and not with other forms of this disease. Remarkably, however, we still basically lack comprehensive understanding of how steroids act on muscle and heart. We need this knowledge to refine steroid treatments in order to maximize the beneficial effects on chronically damaged muscle, and to minimize side effects like obesity, osteoporosis, and – quite paradoxically – muscle degeneration too.

- **How will this award help you in your research?**

This development award, co-sponsored by the AANEM, will support me in critically advancing knowledge about the action of steroids in muscle on two parallel fronts: 1) I will investigate how different frequencies of steroid dosing (for example: weekly, daily,...) impact the ability of muscle to self-repair; 2) I will study how the action of steroids entwines with a potent genetic regulators of muscle function, shedding light on how efficacious steroids can be in the presence of genetic variations. Importantly, I will benefit from the highly valuable networks of scientific and medical experts that the AANEM gathers in the field of neuromuscular diseases.