

Biomechanics of Riding Seminar



Jennifer Cavallaro explains the muscles at the base of the neck.



Holly Mason gives a demonstration on Bubbalicious.

by Nancy Zacks

On Saturday, October 25, nine riders gathered at Brookside Equestrian Center in North Smithfield, Rhode Island to learn about the basics of biomechanics with Jennifer Cavallaro and Holly Mason.

During the morning session, Jennifer focused on equine and human anatomy, helping us all understand how correct biomechanics help our horses carry us with less effort. It was a new world of understanding that expanded our knowledge to include the precise ways that horses and humans move collaboratively.

What does it mean to ride with knowledge of biomechanics? First, says Jennifer, "Remember that you can be an impediment to the horse's movement and you must stay out of his way". She showed what is needed to move with more body awareness and to recognize how difficult it is to correct bad habits.

Learning and executing what is needed to direct yourself and the horse into balance is challenging, technical work. The instructors likened it to studying music, and this analogy was beautifully illustrated with an inspiring comparison of music and riding by Paul Mason, a jazz drummer and teacher in Brown University's Applied Music Department.

Moving from music to riding after lunch, biomechanical principles were reviewed with a mounted demonstration by Holly Mason and Bubbalicious, a gray TB/Percheron, owned by Kristen Vance. Holly, a dressage instructor and creator of the recently released videotape *Focus on Flexibility*, rode a series of arena exercises. Her running commentary, with interjections by Jennifer, helped us visualize more clearly the principles of biomechanics we had studied in the morning session.

Christine Janis, a professor of Ecology and Evolutionary Biology at Brown University told me "The main thing was the connection from the abdominal muscles first, through to the back limbs, over the back and finally to the head. That connection was spelled out precisely in terms of biomechanics and was really interesting. I always tried to ride my horse 'from back to front' but now I can see the importance of this even more."

"I learned that the hindquarters are quite flexible and horses are able to engage there without undue interference to the back and neck. I've always considered the topline to be a single system. I'm going to start to include exercises that work the hind end and increase flexibility, since I've been remiss in this area." said Joan Bessette, who rides her quarter horse western style.

"I learned exactly, anatomically, what self-carriage is" said Susan Harris Walker. "I have read extensively trying to find someone who could describe it. This is the first real explanation I have heard."

Knowing more about biomechanics is addictive – the more you know, the more you want to know. After the seminar, I found myself digging through my old anatomy texts and saying "ah-ha, so that's what it means". Those who attended The Biomechanics of Riding Seminar came away with a clear understanding of the anatomy and physics of what we do when we ride. Paul's demonstration was a refreshing change of pace and reminded us of the profound relationship between Science and Art. It was an informative and fun afternoon.

This seminar will be repeated in the spring on a Sunday, to accommodate those that expressed interest in attending.