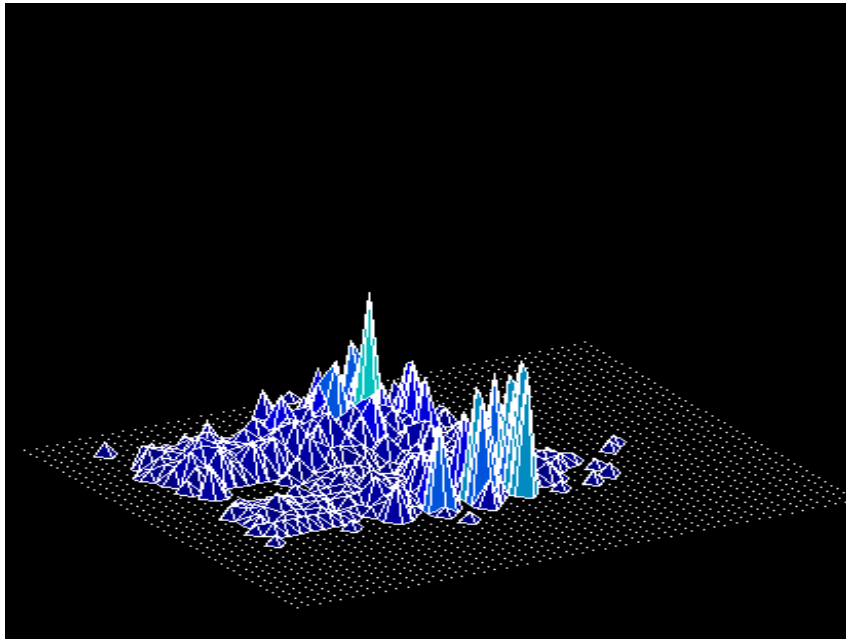


Ab-Inforcer® Pressure Distributions Analysis

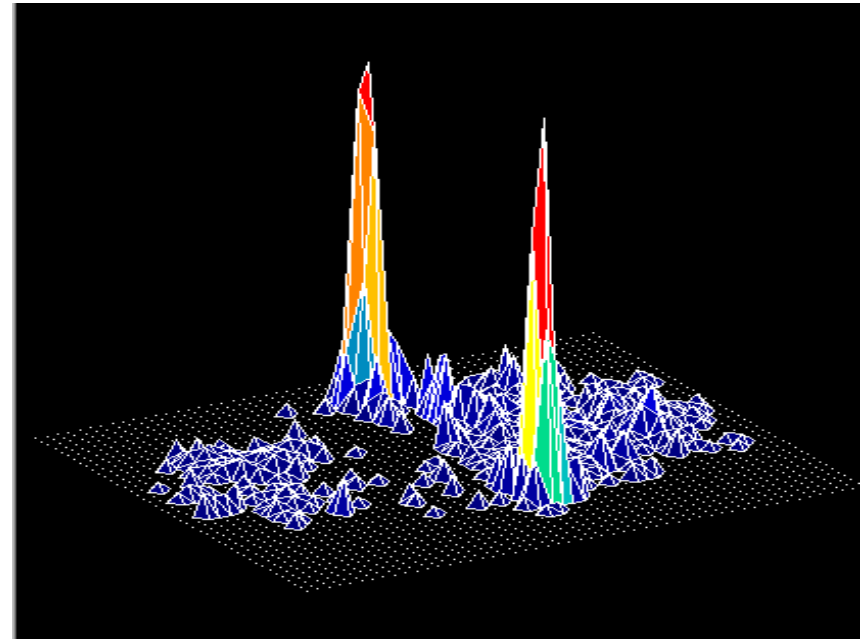
Done by a major North American Biomechanics Lab

October 2005

Lateral Pressure

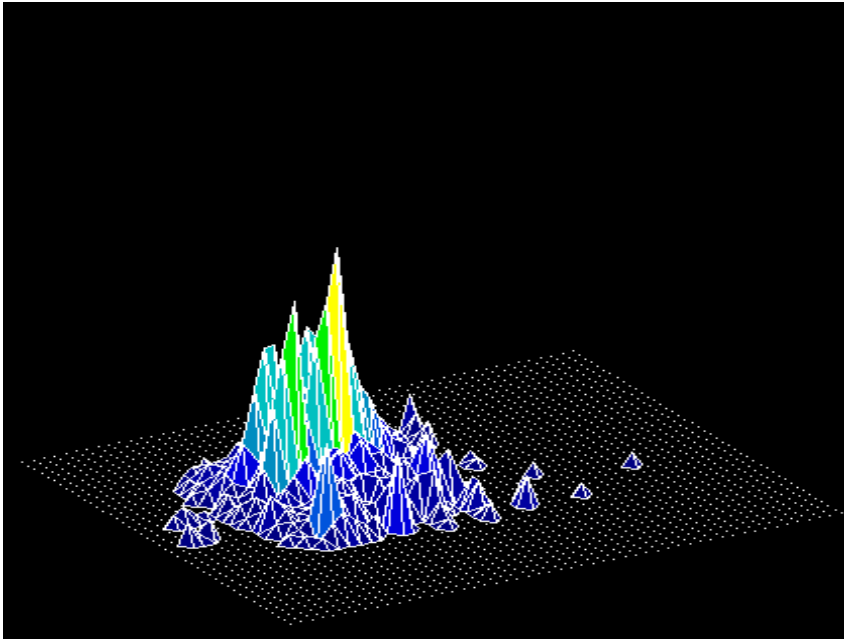


User 1 Male pushing on
sensors (asymptomatic).

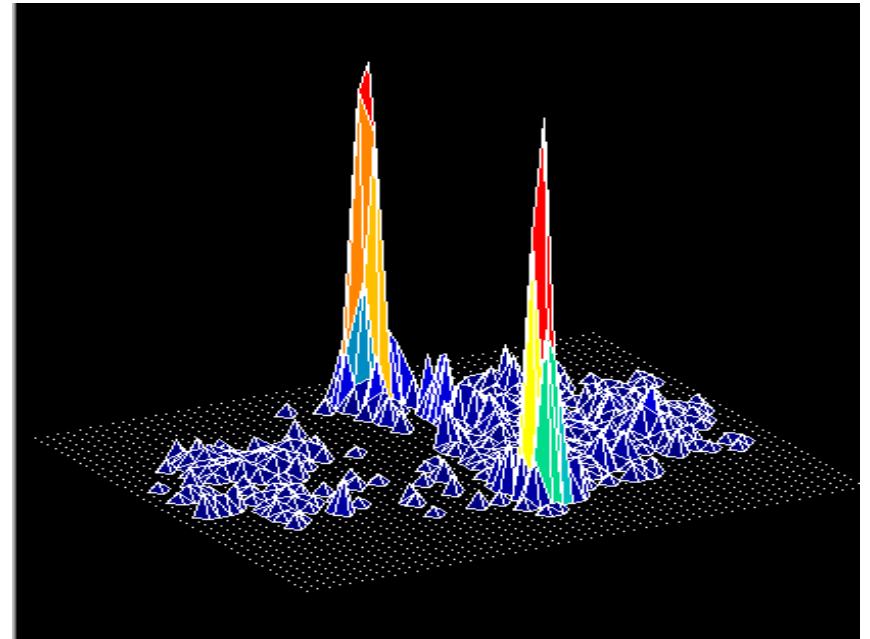


Outer edges of lumbar
support

Lateral Pressure

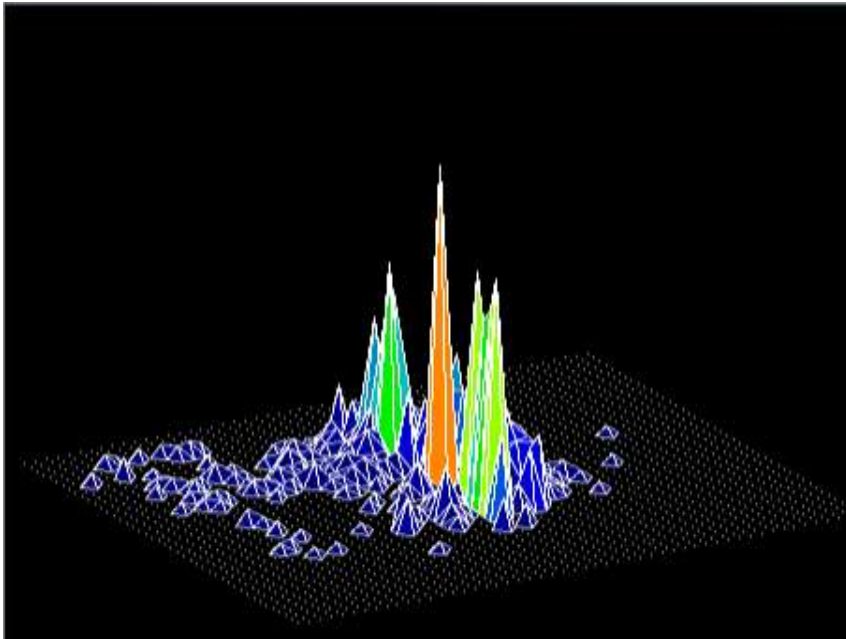


User 2 Female pushing on
sensors (extension biased with larger
girth hips)

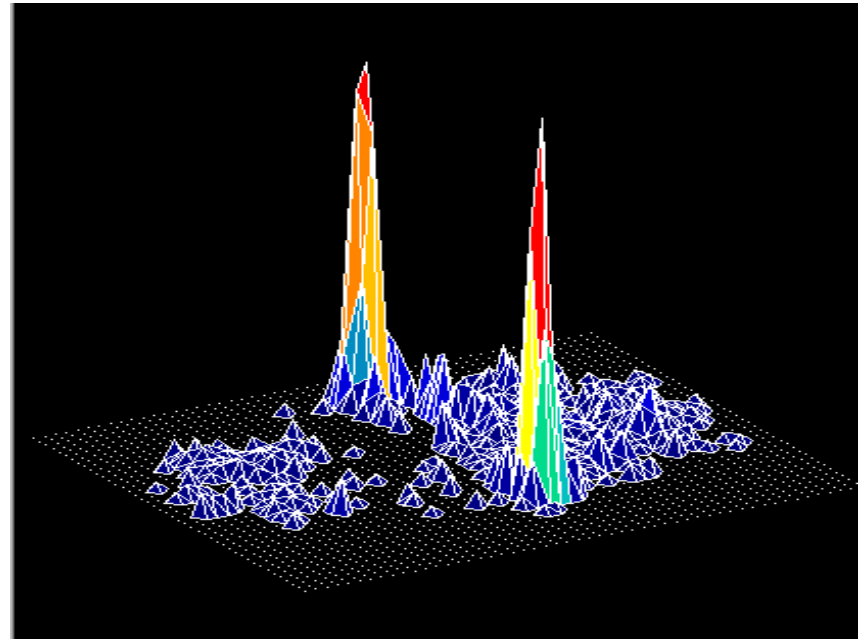


Outer edges of lumbar
support

Central Pressure



User 3 Male (flexion biased)
pushing on sensors



Outer edges of lumbar
support

Final Comments

October 2005

- Decrease height of outer edges of lumbar support to reduce lateral pressure in those with wider hips. Manufacturing tools were modified to lower outer edges of lumbar support 12-2005 to accommodate this recommendation.
- Low compliance of lumbar sensors may be an issue in those with more soft tissue in the lumbar region. Special considerations need to be given while customizing the neutral spine fit for Larger or an obese population of users (those with larger waist girths and larger hips). The device will accommodate up to #350 lbs. Some larger body types may not be accommodated.
- Current height of lumbar support was comfortable for all participants. Additional bolstering was uncomfortable. The generic shapes of all the contoured shapes on the AB-Inforcer® were tested for 5 years with apparently healthy users to accommodate many different body types (4'11-7'2). Special medical guidelines and considerations for those with indicated lower back pain regarding customized form and fit need to be supervised and approved by a Physician and health care practitioner.