

Lumbar Spine

Imaging Modality: MRI

| Application | Expert Mentor | Email | Location | Potential Opportunities | | |
|------------------------------------|---------------|--|---|-------------------------|----------|------------|
| | | | | Collaborating | Post-doc | Sabbatical |
| Diffusion - weighted spine imaging | Paul Beattie | PBEATTIE@mailbox.sc.edu | University of South Carolina Columbia, SC | Yes | Yes | Yes |
| Paraspinal muscle morphology/size | George Beneck | gbeneck@csulb.edu | California State University, Long Beach Long Beach, CA | Yes | No | No |
| Muscle, bone, disc | Sam Ward | s1ward@ucsd.edu | University of California, San Diego La Jolla, CA | Yes | Yes | Yes |

Imaging Modality: Ultrasound

| | | | | | | |
|--|-------------------|--|---|-----|-------|-------|
| Lumbar extensor size | Megan Sions | megsions@udel.edu | University of Delaware Newark, DE | Yes | Maybe | Maybe |
| Trunk muscle activation, i.e., thickness change | George Beneck | gbeneck@csulb.edu | California State University, Long Beach Long Beach, CA | Yes | No | No |
| | Megan Sions | megsions@udel.edu | University of Delaware Newark, DE | Yes | Maybe | Maybe |
| Lumbar multifidus activation using thickness change via B-mode US | Shane Koppenhaver | shanekoppenhaver@mac.com | Baylor University Waco, TX | Yes | No | No |
| Lumbar musculature (erector spine, lumbar multifidus) activation using stiffness change via shear-wave elastography | | | | | | |
| Ultrasound-guided insertions: paraspinal muscles | George Beneck | gbeneck@csulb.edu | California State University, Long Beach Long Beach, CA | Yes | No | No |
| Muscle activation/thickness | Randy Lazicki | lazicki@campbell.edu | Campbell University Ft. Bragg, NC | Yes | No | No |
| Muscle | Sam Ward | s1ward@ucsd.edu | University of California, San Diego La Jolla, CA | Yes | Yes | Yes |