

Dynamic Body[®]

*Exploring Form
Expanding Function*

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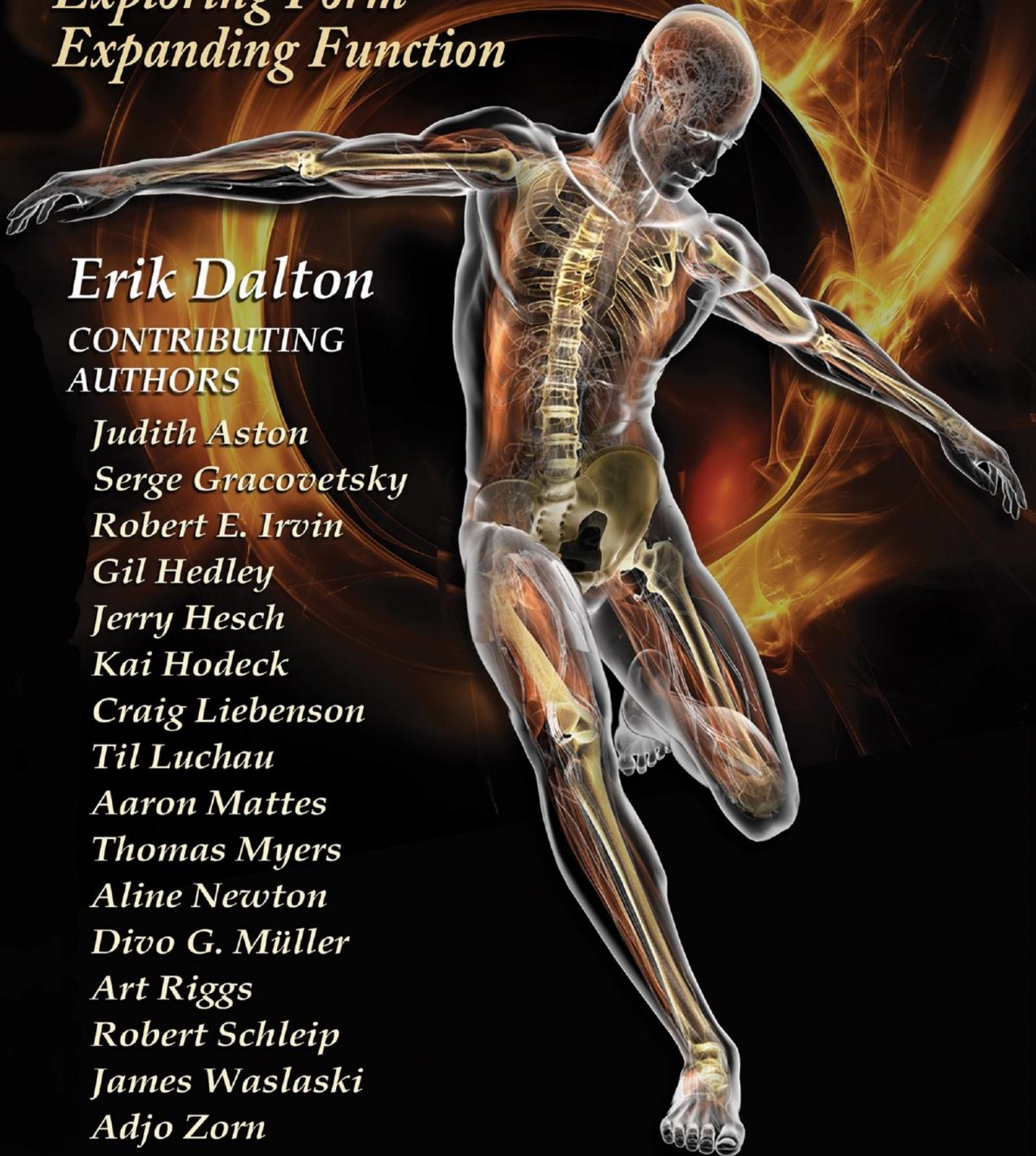
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References

1. Greenman, P.E. (1989). *Principles of Manual spondylitis on sacroiliac joint movement patterns*. Presented at 7th Interdisciplinary World Congress on Low Back and Pelvic Pain, Los Angeles, CA.
2. Schamberger, W. (2002). *The Malalignment Syndrome* (pp. 55-57). Edinburgh, Scotland: Churchill Livingstone.
3. Fryette, H. (1966). *Principles of Osteopathic Technic*. Carmel, CA: Academy of Applied Osteopathy.
4. Greenman, *Manual Medicine*, 227-229.
5. Mitchell, F. Sr. (1958). *Structural Pelvic Function* (pp. 72-90). Carmel, CA: Academy of Applied Osteopathy.
6. Mitchell, F. Jr., Moran, P., & Pruzzo, N. (1979). *An Evaluation and Treatment Manual of Osteopathic Muscle Energy Procedures*. Valley Park, MO: ICEOP.
7. Mitchell, F. Jr., & Mitchell, P. (1995). *The Muscle Energy Manual*. East Lansing, MI: MET Press.
8. Richard, R. (1986). Sacral lesions in torsion about an oblique axis. In R. Richard (Ed.), *Osteopathic Lesions of the Sacrum* (pp. 255-272). New York, NY: Thorsons Publishing.
9. Nyberg, R. (1989). Pelvic girdle. In O. Payton (Ed.), *Manual of Physical Therapy* (pp. 372-376). New York, NY: Churchill Livingstone.
10. Woerman, A.L. (1989). Evaluation and treatment of dysfunction in the lumbar-pelvic-hip complex. In R. Donatelli, & M. Wooden (Eds.), *Orthopaedic Physical Therapy* (pp. 496 & 500-504). New York, NY: Churchill Livingstone.
11. Schamberger, *Malalignment Syndrome*, 55.
12. Greenman, P. (1990). Clinical aspects of sacroiliac function in walking. *J Man Med*, 5(3), 127-129.
13. Maitland, G.D. (1986). *Vertebral Manipulation* (5th ed.), (pp. 314-317). London, United Kingdom: Butterworths.
14. DonTigny, R. (1979). Dysfunction of the sacroiliac joint and its treatment. *J Orthop Sports Phys Ther*, 1(1), 23-35.
15. DonTigny, R. (1985). Function and pathomechanics of the sacroiliac joint. *Phys Ther*, 65(1), 35-44.
16. DonTigny, R. (1990). Anterior dysfunction of the sacroiliac joint as a major factor in the etiology of idiopathic low back pain syndrome. *Phys Ther*, 70(4), 250-262.
17. Grieve, G. (1986). *Modern Manual Therapy of the Vertebral Column* (pp. 324-329). New York, NY: Churchill Livingstone.
18. Makofsky, H.W. (2003). *Spinal Manual Therapy* (p. 170). Thorofare, NJ: SLACK Incorporated.
19. Porterfield, J. (1985). The sacroiliac joint. In G. Davis, & J. Gould (Eds.), *Orthopedics and Sports Physical Therapy* (pp. 550-579). St Louis, MO: CV Mosby.
20. Porterfield, J., & DeRosa, C. (1990). The sacroiliac joint. In G. Davis, & J. Gould (Eds.), *Orthopedic and Sports Physical Therapy* (2nd ed.), (pp. 553-574). St Louis, MO: Mosby-Yearbook.
21. Porterfield, J., & DeRosa, C. (1991). *Mechanical Low Back Pain: Perspectives in Functional Anatomy*. Philadelphia, PA: W.B. Saunders.
22. Prather, H., & Hunt, D. (2010). Sacroiliac joint problems. In C.A. Guanche (Ed.), *Hip and Pelvis Injuries in Sports Medicine* (pp. 200-206). Philadelphia, PA: Lippincott Williams & Wilkins.
23. Bourdillon, J.F., & Day, E.A. (1987). *Spinal Manipulation* (4th ed.), (pp. 64-65). London, United Kingdom: William Heineman Medical Books.
24. Lewit, K. (1999). *Manipulation in Rehabilitation of the Locomotor System* (2nd ed.), (pp. 162-164). London, United Kingdom: Butterworth.
25. Levangie, P.K., & Norkin, C.C. (2005). The hip complex. In *Joint Structure & Function: A Comprehensive Analysis* (pp. 368-372). Philadelphia, PA: F.A. Davis.
26. Neumann, D. (2002). Axial skeleton: osteology and arthrology. In *Kinesiology of the Musculoskeletal System* (pp. 303-305). St Louis, MO: Mosby Inc.
27. Neumann, "Axial skeleton," 303.
28. Hesch, J., Aisenbrey, J., & Guarino, J. (1990, June). *The Pitfalls Associated With Traditional Evaluation of Sacroiliac Dysfunction and Their Proposed Solution*. Presented at Annual Conference of the American Physical Therapy Association, Anaheim, CA.

29. Hesch, J. (1992, November). *Manual therapy evaluation of the pelvic joints using palpatory and articular spring tests*. Presented at First Interdisciplinary World Congress on Low Back Pain and Its Relation to the Sacroiliac Joint, San Diego, CA.
30. Beal, M.C. (1982). The sacroiliac problem: review of anatomy, mechanics, and diagnosis. *J Am Osteopath Assoc*, 81(10), 73-85.
31. Jordan, T.R. (2006). Conceptual and treatment models in osteopathy II: sacroiliac mechanics revisited. *Am Acad Osteopath J*, 16(2), 11-17.
32. Greenman, *Manual Medicine*, 225 & 229.
33. Flynn, T.W., Cleland, J.A., & Whitman, J.M. (2008). *User's Guide to Musculoskeletal Examination: Fundamentals for the Evidence-Based Clinician* (pp. 196-217). Buckner, NY: Evidence in Motion.
34. Goode, A., Hegedus, E.J., Sizer, P., Brismee, J.M., Linberg, A., & Cook, C. (2008). Three-dimensional movements of the sacroiliac joints: a systematic review of the literature and assessment of clinical utility. *J Man Manip Ther*, 16(1), 25-38.
35. Huijbregts, P. (2004, May/June). Sacroiliac joint dysfunction: evidence-based diagnosis. *Orthopaedic Division Review*, 18-44.
36. Huijbregts, P. (2008). Evidence-based diagnosis and treatment of the painful sacroiliac joint. *J Man Manip Ther*, 16(3), 153-154.
37. Woerman, "Lumbar-pelvic-hip complex," 500.
38. Janiak, D.D. (2001). Review of sacral somatic dysfunction. *Am Acad Osteopath J*, 11(1), 18-23.
39. Educational Council on Osteopathic Principles. *Glossary of Osteopathic Terminology*. American Association of Colleges of Osteopathic Medicine. Retrieved August 25, 2011, from <http://www.aacom.org/resources/bookstore/Pages/glossary.aspx>
40. Cook, C. (2008). Philosophical differences in manual therapy. *J Man Manip Ther*, 16(1), 5-6.
41. Mintken, P., DeRosa, C., Little, T., & Smith, B. (2008). A model for standardizing manipulation terminology in physical therapy practice. *J Man Manip Ther*, 16(1), 50-56.
42. Hungerford, B. (2003). Evidence of altered lumbopelvic muscle recruitment in the presence of sacroiliac joint pain. *Spine*, 28(14), 1593-1600.
43. Scholtes, S.A., Norton, B.J., Lang, C.E., & Van Dillen, L.R. (2010). The effect of within-session instruction on lumbopelvic motion during a lower limb movement in people with and people without low back pain. *Man Ther*, 15(5), 496-501.
44. Reiman, M.P., Cox, K.D., Jones, K.S., & Byrd, J.W. (2011). Lumbo-pelvic-hip complex pain in a competitive basketball player: a case study. *Sports Health*, 3(1), 70-72.
45. Hesch, J. (2001-2011). *The Hesch Method of Treating Sacroiliac Joint Dysfunction: Integrating the Pelvis, SI, Symphysis Pubis, Hip and Lumbar Spine*. Seminar presented at the Hesch Institute, Henderson, NV.
46. Woerman, "Lumbar-pelvic-hip complex," 500-501.
47. Greenman, *Manual Medicine*, 247-248.
48. Goode, "Sacroiliac joints," 35.
49. Huijbregts, "Sacroiliac joint dysfunction," 18.
50. Cook, C., Massa, L., Harm-Ernandes, I., Segneri, R., Adcock, J., Kennedy, C., & Figuers, C. (2007). Interrater reliability and diagnostic accuracy of pelvic girdle pain classification. *J Manip Physiol Ther*, 30(4), 252-258.
51. Holmgren, U., & Waling, K. (2008). Inter-examiner reliability of four static palpation tests used for assessing pelvic dysfunction. *Man Ther*, 13(1):50-56.
52. Riddle, D.L., & Freburger, J.K. (2002). Evaluation of the presence of sacroiliac joint region dysfunction using a combination of tests: a multicenter intertester reliability study. *Phys Ther*, 82(8), 772-781.
53. Laslett, M. (2008). Evidence-based diagnosis and treatment of the painful sacroiliac joint. *J Man Manip Ther*, 16(3):142-152.
54. Robinson, H.S., Brox, J.I., Robinson, R., Bjelland, E., Solem, S., & Telje, T. (2007). The reliability of selected motion- and pain provocation tests for the sacroiliac joint. *Man Ther*, 12(1), 72-79.

55. Ivanov, A.A., Kiapour, A., Ebraheim, N.A., & Goel, V. (2009). Lumbar fusion leads to increases in angular motion and stress across sacroiliac joint: a finite element study. *Spine*, *34*(5), 162-169.
56. Lavignolle, B., Vital, J.M., Senegas, J., Destandau, J., Toson, B., Bouyx, P., ... Calabet, A. (1983). An approach to the functional anatomy of the sacroiliac joints in vivo. *Anat Clin*, *5*(3), 169-176.
57. Lumsden, R., & Morris, J. (1968). An in vivo study of axial rotation and immobilization at the lumbosacral joint. *J Bone Joint Surg*, *50*(8), 1591-1602.
58. Miller, J., Schultz, A., & Andersson, G. (1987). Load-displacement behavior of sacroiliac joints. *J Orthop Res*, *5*(1), 92-101.
59. Miles, M., & Sullivan, W.E. (1961). Lateral bending at the lumbar and lumbosacral joints. *Anat Rec*, *139*(3), 387-398.
60. Panjabi, M., Yamamoto, I., Oxland, T., & Crisco, J. (1989). How does posture affect coupling in the lumbar spine? *Spine*, *14*(9), 1002-1011.
61. Percy, M.J. (1985). Stereo radiography of lumbar spine motion. *Acta Orthop Scand Suppl*, *212*, 1-45.
62. Wang, M. (1998). Mechanical behavior of the female sacroiliac joint and influence of the anterior and posterior sacroiliac ligaments under sagittal loads. *Clin Biomech*, *13*(4-5), 293-299.
63. Weitz, E.M. (1981). The lateral bending sign. *Spine*, *6*(4), 388-397.
64. Wood, K.B., Schendel, M.J., Ogilvie, J.W., Braun, J., Major, M.C., & Malcom, J.R. (1996). Effect of sacral and iliac instrumentation on strains in the pelvis. A biomechanical study. *Spine*, *21*(10), 1185-1191.
65. Yamamoto, I., Panjabi, M., Crisco, J., & Oxland, T. (1989). Three-dimensional movements of the whole lumbar spine and lumbosacral joint. *Spine*, *14*(11), 1256-1260.
66. Stevens, A. (1992). Side-bending and axial rotation of the sacrum inside the pelvic girdle. In A. Vleeming, V. Mooney, C. Snijders, & T. Dorman (Eds.), Proceedings from: *First Interdisciplinary World Congress on Low Back Pain and its Relation to the Sacroiliac Joint* (pp. 209-230). San Diego, CA.
67. Stevens, A., & Vyncke, G. (1986). Sacrum rotation in the horizontal plane on lateral bending. Proceedings from: *8th Congress of the International Federation for Manual Medicine* (pp. 24 & 28). Madrid, Spain.
68. Stevens, "Side-bending," 228.
69. Mitchell, *Structural Pelvic Function*, 74.
70. Egund, N., Olsson, T.H., Schmid, H., & Selvid, G. (1978). Movements in the sacroiliac joints demonstrated with roentgen stereophotogrammetry. *Acta Radiol Diagn*, *19*(5), 833-846.
71. Stureson, B., Selvik, G., & Udén, A. (1989). Movements of the sacroiliac joints: a roentgen stereophotogrammetric analysis. *Spine*, *14*(2), 162-165.
72. Stureson, B., Udén, A., & Vleeming, A. (2000). A radiostereometric analysis of movements of the sacroiliac joints during the standing hip flexion test. *Spine*, *25*(3), 364-368.
73. Hesch, "World Congress."
74. Whitman, J., Flynn, T., Magel, J., Rendeiro, D., Butler, B., Wainner, R., & Allison, S. (2001, November). Does manual therapy experience influence reliability for selected pelvic girdle tests and measures? Proceedings from: *4th Interdisciplinary World Congress on Low Back & Pelvic Pain*. Montreal, Canada.
75. Olson, L. (1998). Effects from the Hesch method pelvic mobilization on lumbar flexion, straight leg raise performance, and standing pelvic inclination angles in patients with low back pain. (Doctoral dissertation). Finch University of Health Sciences/The Chicago Medical School, Chicago, IL.
76. Olson, L., & Kraemer, T.J. (2003, June). *Establishing the reliability of the Hesch method spring and positional tests in patients with low back pain*. Presented at 14th International Congress of the World Confederation for Physical Therapy, Barcelona, Spain.
77. Smidt, G.L., McQuade, K., Wei, S.H., & Barakatt, E. (1995). Sacroiliac kinematics for reciprocal straddle positions. *Spine*, *20*(9), 1047-1054.
78. Bussey, M.D., Yanai, T., & Milburn, P. (2004). A non-invasive technique for assessing innominate bone motion. *Clin Biomech (Bristol, Avon)*, *19*(1), 85-90.

79. Bussey, M.D., Bell, M.L., & Milosavljevic, S. (2010, November). The effect of ankylosing spondylitis on sacroiliac joint movement patterns. Presented at 7th Interdisciplinary World Congress on Low Back and Pelvic Pain, Los Angeles, CA.
80. Bussey, M.D. (2010). Does the demand for asymmetrical functional lower body postures in lateral sports relate to structural asymmetry of the pelvis? *J Sci Med Sport*, 13(3), 360-364.
81. Tullberg, T., Blomberg, S., Branth, B., & Johnsson, R. (1998). Manipulation does not alter the position of the sacroiliac joint. A roentgen stereophotogrammetric analysis. *Spine*, 23(10), 1124-1129.
82. Dar, G., Khamis, S., Peleg, S., Masharawi, Y., Steinberg, N., Peled, N. ... Hershkovitz, I. (2008). Sacroiliac joint fusion and the implications for manual therapy diagnosis and treatment. *Man Ther*, 13(2), 155-158.
83. Weinert, D.J. (2007). Influence of axial rotation on chiropractic pelvic radiograph analysis. *J Manip Physiol Ther*, 30(1), 78-79.
84. Lucas, B., Asher, M., McIlff, T., Lark, R., & Burton, D. (2005). Estimation of transverse plane pelvic rotation using a posterior-anterior radiograph. *Spine*, 30(1), E20-27.
85. Robbins, S.E., & Morse, M.H. (1996). Is the acquisition of a separate view of the sacroiliac joints in the prone position justified in patients with back pain? *Clin Radiol*, 51(9), 637-638.
86. Badii, M., Shin, S., Torreggiani, W., Jankovic, B., Gustafson, P., Munk, P.L., & Esdaile, J.M. (2003). Pelvic bone asymmetry in 323 study participants receiving abdominal CT scans. *Spine*, 28(12), 1335-1339.
87. Fafila, C.P., Prassopoulos, P.K., Daskalogiannaki, M.E., & Gourtsoyiannis, N.C. (1998). Variation in the appearance of the normal sacroiliac joint on pelvic CT. *Clin Radiol*, 53(10), 742-746.
88. Marshall, P., & Murphy, B. (2006). The effect of sacroiliac joint manipulation on feed-forward activation times of the deep abdominal musculature. *J Manip Physiol Ther*, 29(3), 196-202.
89. Suter, E., McMorland, G., Herzog, W., & Bray, R. (1999). Decrease in quadriceps inhibition after sacroiliac joint manipulation in patients with anterior knee pain. *J Manip Physiol Ther*, 22(3), 149-153.
90. O'Sullivan, P.B., Beales, D.J., Beetham, J.A., Cripps, J., Graf, F., Lin, I.B. ... Avery, A. (2002). Altered motor control strategies in subjects with sacroiliac joint pain during the active straight-leg-raise test. *Spine*, 27(1), E1-8.
91. Painter E.E., Ogle, M.D., & Teyhen, D.S. (2007). Lumbopelvic dysfunction and stress urinary incontinence: a case report applying rehabilitative ultrasound imaging. *J Ortho Sports Phys Ther*, 37(8), 499-504.
92. Hesch, J. (2010, November). Case studies: downslip ilium with paradoxical upslip ilium appearance, pudendal neuropathy, parainguinal neuropathy; a new internal sensory diagnostic test. Presented at 7th Interdisciplinary World Congress on Low Back and Pelvic Pain, Los Angeles, CA.
93. Neville, C. (2008). An interdisciplinary approach to treatment of a patient with chronic pelvic pain following gall bladder surgery: a case report. *J Women Health Phys Ther*, 32(2), 24-34.
94. Cibulka, M.T. (1999). Low back pain and its relation to the hip and foot. *J Ortho Sports Phys Ther*, 29(10), 595-601.
95. Voorn, R. (1998). Case report: can sacroiliac joint dysfunction cause chronic achilles tendinitis? *J Ortho Sports Phys Ther*, 27(6), 436-443.
96. Indahl, A., Kaigle, A., Reikeras, O., & Holm, S. (1999). Sacroiliac joint involvement in activation of the porcine spinal and gluteal musculature. *J Spin Disord*, 2(4), 325-330.
97. Wyke, B.D. (1972). Articular neurology: a review. *Physiotherapy*, 58(3), 94-99.
98. Sakamoto, N., Yamashita, T., Takebayashi, T., Sekine, M., & Ishii, S. (2001). An electrophysiologic study of mechanoreceptors in the sacroiliac joint and adjacent tissues. *Spine*, 26(20), 468-471.
99. Szadek, K.M., Hoogland, P.V., Zuurmond, W.W., de Lange, J.J., & Perez, R.S. (2008). Nociceptive nerve fibers in the sacroiliac joint in humans. *Reg Anesth Pain Med*, 33(1), 36-43.
100. Murakami, E., Tanaka, Y., Aizawa, T., Ishizuka, M., & Kokubun, S. (2007). Effect of periarticular and intraarticular lidocaine injections for sacroiliac joint pain: prospective comparative study. *J Orthop Sci*, 12(3), 274-280.

101. Stoddard, A. (1980). *Manual of Osteopathic Technique*. London, United Kingdom: Hutchinson.
102. Bernard, T. (1992, November). Sacroiliac joint injection. Presented at the First Interdisciplinary World Congress on Low Back Pain and Its Relation to the Sacroiliac Joint, San Diego, CA.
102. Walker, J.M. (1992). The sacroiliac joint: a critical review. *Phys Ther*, 72(12), 913.
103. Davis, P., & Lentle, B. (1978). Evidence for sacroiliac disease as a common cause of low backache in women. *The Lancet*, 312(8088), 496-497.
104. Depledge, J., McNair, P.J., Keal-Smith, C., & Williams, M. (2005). Management of symphysis pubis dysfunction during pregnancy using exercise and pelvic support belts. *Phys Ther*, 85(12), 1290-1300.
105. Eichner, E., Waltner, C., Goodman, M., & Post, S. (1956). Relaxin, the third ovarian hormone: its experimental use in women. *Am J Obstet Gynecol*, 71(5), 1035-1048.
106. Epstein, J.A. (1959). Treatment of low back pain and sciatic syndromes during pregnancy: a symposium. *NY State J Med*, 59(9), 1757-1768.
107. Farbroth, E. (1952). The relationship of the effect and pain of pregnancy to the anatomy of the pelvis. *Acta Radiol*, 38(5), 403-419.
108. Fast, A., Shapiro, D., Ducommun, E., Friedmann, L.W., Bouklas, T., & Floman, Y. (1987). Low-back pain in pregnancy. *Spine*, 12(4), 368-371.
109. Golightly, R. (1982). Pelvic arthropathy in pregnancy and puerperium. *Physiotherapy*, 68(7), 216-220.
110. Grose, A. (1986, January). Pelvic ring instability during pregnancy. Unpublished material.
111. Hagen, R. (1974). Pelvic girdle relaxation from an orthopedic view. *Acta Orthop Scand*, 45(4), 550-563.
112. Joseph, J. (1988). The joints of the pelvis and their relation to posture in labor. *Midwives Chron*, 101(1202), 63-64.
113. Laban, M.M., & Meerschaert, J.R. (1975). Lumbosacral-anterior pelvic pain with pubic symphysis instability. *Arch Phys Med Rehab*, 56, 48.
114. Lynch, F.W. (1920). The pelvic articulations during pregnancy, labor and puerperium: an X-ray study. *Surg Gynecol Obstet*, 30, 575-580.
115. MacLennan, A.H. (1983). The role of relaxin in human reproduction. *Clin Reprod Fertil*, 2(2), 77-95.
116. MacLennan, A.H. (1991). The role of the hormone relaxin in human reproduction and pelvic girdle relaxation. *Scan J Rheumatol Suppl*, 88, 7-15.
117. Quagliarello, J., Steinetz, B.G., & Weiss, G. (1979). Relaxin secretion in early pregnancy. *Obstet Gynecol*, 53(1), 62-63.
118. Sands, R. (1958). Backache of pregnancy. *Obstet Gynecol*, 12(6), 670-676.
119. Sicuranza, B., Richards, J., & Tisdall, L. (1970). The short leg syndrome in obstetrics and gynecology. *Am J Obstet Gynecol*, 107(2), 217-219.
120. Svensson, H.O., Andersson, G.B., Hagstad, A., & Jansson, P. (1990). The relationship of low-back pain to pregnancy and gynecologic factors. *Spine*, 15(5), 371-375.
121. Walheim, G. (1979). Pelvic instability after fracture and parturition. *Acta Orthop Scand*, 50, 362.
122. Weiss, G., O'Byrne, E.M., & Steinetz, B.G. (1976). Relaxin: a product of the human corpus luteum of pregnancy. *Science*, 194(4268), 948-949.
123. Young, L. (1940). Relaxation of the pelvic joints in pregnancy. *Brit J Obstet Gyneac*, 47, 493-524.
124. Badii et al., "Pelvic bone asymmetry."
125. Eustance, S., Coughlan, R.J., & McCarthy, C. (1993). Ankylosing spondylitis. *A comparison of clinical and radiographic features in men and women. Ir Med J*, 86(4), 120-122.
126. Wurdinger, S., Humbsch, K., Reichenbach, J.R., Peiker, G., Seewald, H.J., & Kaiser, W.A. (2002). MRI of the pelvic ring joints postpartum: normal and pathological findings. *J Magn Reson Imaging*, 15(3):324-329.
127. Coventry, M., & Tapper, E. (1972). Pelvic instability: a consequence of removing iliac bone for grafting. *J Bone Joint Surg Am*, 54(1), 83-101.
128. Ha, K.Y., Lee, J.S., & Kim, K.W. (1976). Degeneration of sacroiliac joint after instrumented lumbar or lumbosacral fusion: a prospective cohort study over five-year follow-up. *Spine*, 33(11), 1192-1198.
129. Macnab, I. (1981). Backache (pp. 64-78 & 217-218). Baltimore, MD: Williams & Wilkins.

130. Maigne, J.Y., & Planchon, C.A. (2005). Sacroiliac joint pain after lumbar fusion. A study with anesthetic blocks. *Eur Spine J*, 14(7), 654-658.
132. McGregor, M., & Cassidy, J.D. (1983). Post-surgical sacroiliac joint syndrome. *J Manip Physiol Ther*, 6(1), 1-11.
133. Zimmermann, T., Patzak, H.J., Kelm, C., Flechsenhar, K., & Kunze, K. (1992). Treatment of ruptures of the symphysis and iliosacral joint in pediatric patients. *Eur J Pediatr Surg*, 2(6), 348-351.
134. Hesch, J. (1996). Evaluating sacroiliac joint play with spring tests. *Ob Gyn PT*, 20(3), 4-7.
135. Vleeming, A., Van Wingerden, J.P., Snijders, C., Stoeckart, R., & Stijnen, T. (1989). Load application to the sacrotuberous ligament: influences on sacroiliac joint mechanics. *Clin Biomech*, 4, 204-209.
136. Hesch J. (1997). Evaluation and treatment of the most common pattern of sacroiliac joint dysfunction. In A. Vleeming, V. Mooney, T. Dorman, C. Snijders, & R. Stoeckart (Eds.), *Movement, Stability & Low Back Pain: The Essential Role of the Pelvis* (pp. 535-552). London, United Kingdom: Churchill Livingstone.
137. Huijbregts, "Sacroiliac joint dysfunction," 22-23.
138. Hesch, J. (2001-2011). *The Hesch Method of treating sacroiliac joint dysfunction: integrating the pelvis, SI, symphysis pubis, hip and lumbar spine*. Henderson, NV: Hesch Institute.
139. Greenman, *Manual Medicine*, 238.
140. Greenman, *Manual Medicine*, 239-241.
141. Makofsky, *Spinal Manual Therapy*, 7-8 & 11-12.
142. Keating, J., Matyas, T.A., Bach, T.M. (1993). The effect on training on physical therapists' ability to apply specific forces of palpation. *Phys Ther*, 73(1), 45-53.
143. Greenman, *Manual Medicine*, 240-241.
144. Greenman, *Manual Medicine*, 246.
145. Nyberg, "Pelvic girdle," 364-382.
146. Vleeming, A., Snijders, C., Stoeckart, R., & Mens, J. (1997). The role of the sacroiliac joint in coupling between spine, pelvis, legs and arms. In A. Vleeming, V. Mooney, T. Dorman, C. Snijders, C. Egund, & R. Stoeckart (Eds.), *Movement, Stability & Low Back Pain: The Essential Role of the Pelvis* (pp. 55-71). London, United Kingdom: Churchill Livingstone.
147. Grieve, G. (1981). *Common Vertebral Joint Problems* (pp. vii-x). New York, NY: Churchill Livingstone.