

How Fascial Stretch Therapy™ came about	xi
Foreword	xv
Acknowledgements	xvi
Introduction	xviii

Section 1

Chapter 1 The Great Debate about Stretching	3
Introduction	3
Negative outcomes in research	4
Injuries	4
Strength, power and speed	4
Positive outcomes in research	5
Stretching tissues and cells	5
Getting perspective on studies about stretching	6
New definitions	7
Flexibility	7
Form and function	9
Tensegrity	9
Evidence our cells are biotensegrity structures	10
Flexibility and stability of the prestressed body	11
Myofascial tone and tension	12
Cells do the twist	14
Stretching heals injured cells	14
Effects of stretching on proprioceptors and interoceptors	15
FST model of assessment and treatment	16
Summary	17
References	17
Chapter 2 Fascial Stretch Therapy Dissected	21
Introduction	21
Ten fundamental principles of FST	21
1. Synchronize breathing with movement	22
The movement	22
The breathing	22
Combining movement and breathing	23
2. Tune nervous system to current needs	23
3. Follow a logical order	24
4. Range of motion gains without pain	25
Mobilization and TOC	26
5. Stretch neuromyofasciae, not just muscle	26
Mechanoreceptor location	27
6. Use multiple planes of movement	27
7. Target the entire joint	28
8. Get maximal lengthening with traction	29
9. Facilitate body reflexes for optimal results	31
10. Adjust stretching to current goals	32
Intensity	32
Duration	33
Frequency	33
Summary	33
Contraindications for FST	33
Indications for FST	35
Pain conditions	35
Structural conditions with or without pain	35
Sports	35

Summary	36
References	36
Chapter 3 Comparisons and Contrasts	39
Introduction	39
Common stretching methods and approaches	39
Proprioceptive Neuromuscular Facilitation (PNF)	39
Fascial Stretch Therapy	40
Active Isolated Stretching (AIS)	41
Other contemporary stretching methods and techniques	42
Ancient stretching techniques	42
Manual therapy techniques that integrate stretching	43
Summary	43
References	43
Chapter 4 Assessment	45
Introduction	45
Palpatory literacy	46
Movement vs motion quandary	47
Let's START	47
Assessment techniques in a nutshell	48
SITTT	49
Assessment flow: global to local, static to dynamic	51
1. Posture testing	52
2. Myofascial testing	59
3. Joint testing	60
4. Nerve testing	60
Movement assessment summary	60
Table-based assessment	61
Passive movement	61
TOC assessment	62
Traction	62
Oscillation	62
Circumduction	62
Resistance to passive movement (R1-R3)	63
Resisted movement (FST-PNF)	65
Summary	66
References	66
Section 2	
Chapter 5 Lower Body Technique	69
Key Concepts for Technique	69
Introduction	69
The ten fundamental principles of FST	69
Practical guide to implementing the Ten Principles	70
1. Breathing	70
2. Nervous system	70
3. Order	71
4. Gain without pain	71
5. Neuromyofascia	71
6. Multiple planes of movement	71
7. Joint	71
8. Traction	72
9. PNF	72
10. Current goals	73

Range of motion evaluation	73
Explanation of resistance of the tissue feel	73
Breathing technique	74
PNF technique	74
FST-PNF sample sequence	74
Tips for the therapist's success	76
Body mechanics	77
Personal adaptations	77
Practical Section	79
A. General Assessment	80
1. Major observations	80
2. Hip clearance move	80
3. Leg length check	81
4. Double leg traction	81
5. Single leg traction	82
6. Check lateral movement	83
B. Range of Motion Evaluation Warm-up and FST-PNF Stretch – Bent leg single joint	86
1. Circumduction	87
2. Hip/knee flexion – hamstrings, glutei, lumbosacral – SBL, FL	88
3. Hip/knee flexion with hip abduction – hamstrings, glutei, lumbosacral, hip adductors – SBL, FL, DFL	90
4. Hip flexion, abduction and external rotation – medial hamstrings and short adductors – SBL, FL, DFL	91
5. Abduction, hip flexion and external rotation - short adductors and medial hamstrings – SBL, FL, DFL	93
6. Low back/thoracic rotation – thoracolumbar fascia, glute max, glute medius, hip capsule – SBL, SPL, FL	94
7. Traction across body	98
8. Low back rotation, hip flexion, adduction – thoracolumbar, posterior hip - SBL, SPL, FL	99
9. "Sack of Buns": thoracolumbar rotation, hip flexion, ER, knee flexion – thoracolumbar, QL, lumbosacral, hip rotators - SFL, SPL, DFL	100
10. Hip flexion, external rotation, adduction, knee flexed 45° – gluteus medius, piriformis – LL, SPL	102
11. Hip flexion, adduction, external rotation, knee flexed 90° – hip extensors, gluteus maximus – FL	104
C. Range of Motion Evaluation, Warm-up and FST-PNF Stretch – Straight Leg and Multiple Joints	106
1. Hip flexion, knee extension – hamstrings – SBL, SPL	107
2. Hip flexion, abduction, knee extension – medial hamstrings – DFL, SBL, SPL	107
3. Hip flexion, abduction, knee extension – medial hamstring focus – SBL, SPL, FL, DFL	109
4. Hip flexion, abduction, knee extension – long adductors focus – SBL, FL, SPL, DFL	111
5. Hip flexion, abduction, knee extension – hamstrings and long adductors combination – SBL, FL, SPL, DFL	111
6. Hip flexion, adduction, internal rotation with lumbar rotation – low back, glutes, IT band, fibularis – SBL, LL	112
7. Hip flexion, adduction, knee extension, lumbar rotation – low back, lateral hamstrings, glutes, IT band, fibularis - LL, SPL, SBL	114

8. Hip flexion, adduction, internal rotation with lumbar rotation – low back, glutes, IT band, fibularis – lateral hamstrings, high position – SPL, SBL	115
D. Range of Motion Evaluation, Warm-up and FST-PNF Stretch	116
1. Pelvic external rotation – iliacus and psoas – DFL	116
2. Hip extension – hip flexors – SFL, DFL, FL, SPL, LL	117
3. Hip extension, adduction – hip flexors and abductors – SFL, DFL, FL, SPL, LL	119
4. Hip extension – hip flexors – fascial component – SLF, DFL, FL, SPL	120
5. Hip extension, knee flexion – quadriceps focus – SFL, DFL, FL, SPL, FL	122
E. Lateral Line	124
1. Low back side bend from below – fascia from fibularis (peroneals) to QL – LL, SPL	124
F. Repeat Entire Series on the Right Leg B through D	127
G. Pelvic Stabilization and Sacral Set	128
Essential movement to finish all table sequences (long or short)	128
1. Abductor contractions	128
2. Adductor contractions	129
3. Sacral set	130
H. Standing Lunge: Back/Hip/Knee Extension, Ankle Dorsiflexion – Gastrosoleus – SBL	132
Chapter 6 Upper Body Technique	135
A. General Evaluation	135
Supine observations	135
B. Side Lying	136
Shoulder warm-up and assessment	136
C. Range of Motion Evaluation Warm-up and FST-PNF Stretch	140
1. Traction arm up	140
2. Oscillation-circumduction	140
3. Shoulder traction (neutral/loose glenohumeral joint position) – traps, scalenes, joint capsule – SBAL, DBAL	141
4. Shoulder traction (slight flexion/abduction position) – traps, rhomboids, joint capsule – SBAL, DBAL	143
5. Shoulder traction (in 90° abduction) – trap, rhomboids, joint capsule – SFAL, SBAL, DBAL, DFAL, FL	143
6. Shoulder traction in horizontal abduction (at 90°) – pec major/minor, biceps brachii, coracobrachialis – SFAL, DFAL, FL	144
7. Shoulder traction (diagonal overhead position) – pec major/minor, coracobrachialis, rhomboids, lats – FL, SFAL, DFAL, DBAL, SBAL	145
8. Shoulder flexion overhead – pec major/minor, lat, triceps – FL, SFAL, DFAL, DBAL, SBAL	146
9. Shoulder flexion overhead with horizontal adduction – rhomboids, lat, triceps – FL, DBAL, SBAL	147
10. Shoulder horizontal adduction – traps, deltoid, posterior shoulder joint – SBAL	148
11. “Dance of the Carpals”: hand/wrist mobilization – carpal joint glides, capsule and tunnel stretch – SFAL, SBAL	149
12a. “Dish Rag”: shoulder protraction, trunk rotation – posterior shoulder and upper back – SPL, SBAL, DBAL	150
12b. “Dish Rag”: full spinal rotation – erector spinae, quadratus lumborum, rhomboids – SPL, FL	151

13. External rotation – internal rotators – SFAL, DFAL	152
14. Internal rotation – external rotators – DBAL	155
15. Shoulder horizontal abduction/ER (at 90°) – pec major – SFAL, FL	157
16. Shoulder extension/IR, elbow extension – biceps brachii – DFAL	160
17. Setting the shoulder	161
D. ROM Evaluation Warm-up and FST-PNF Stretch	162
1. Shoulder depression – bilateral traps – SBAL	162
2. Neck traction – cranial/cervical joint capsules and tissues – SBAL, DBAL, SBL, DFL	163
3. Sub-occipital traction ROM – sub cranial joint capsule, tissues – SBL, SBAL, DBAL	164
4. Traction, upper cervical flexion – cervical/upper thoracic extensors – SBL, SBAL, DBAL	165
5. Neck rotation right – left cervical rotators – LL, SPL, FL	167
6. Neck lateral flexion right – left lateral flexors – LL, SPL, SBL, SBAL, DBAL, DFL	169
7. Combination of neck lateral flexion and rotation right – left cervical lateral flexors, rotators, extensors – LL, SPL, SBL, SBAL, DBAL, DFL	170
8. Anterior neck traction – anterior neck, supra/infra hyoid – DFL	173
9. Suboccipital traction – sub cranial joint capsule, tissues – SBL, SBAL, DBAL	175
10. Full traction – cranial cervical joint capsules, overlying tissues – SBL, SBAL, DBAL	176
11. “Cranium set”: sub cranial flexion – cranio cervical extensors – DFL	177
12. Shoulder depression – bilateral traps – SBAL	178
E. Sitting Stretches	179
1. Shoulder extension/adduction – anterior deltoid and pecs – SFAL, FL	179
2. Shoulder extension/adduction, elbow flexion – anterior deltoid, pecs, anterior joint capsule – SFAL, FL	180
3. Hands behind head: shoulder abduction, elbow flexion – pec major, anterior chest – SFAL, FL	182
4. Sitting lats: shoulder abduction, elbow flexion – lats, teres major, QL and intercostals – FL, SPL, DFL, LL, DBAL	183
5. Sitting lats: shoulder abduction, elbow flexion, trunk rotation – lats, teres major, QL and intercostals – FL, SPL, DFL, LL, DBAL	185
6. Sitting triceps: shoulder abduction, elbow flexion – triceps – DBAL	186
7. Levator scapulae release: neck rotation, side flexion same side – levator scapulae – DBAL	188
F. Floor Stretches	189
1. Pec major on ball: shoulder abduction, elbow flexion – pec major – SFAL, FL	189
2. Pec minor on ball: shoulder abduction, elbow flexion (90°/90°) – pec minor – DFAL	191
G. Standing Stretch	194
1. Standing rhomboids: trunk rotation, shoulder protraction/flexion – rhomboids – DBAL, SPL	194
Acronym Glossary	196
Index	197