# Certification in Functional Manual Reaction (FMR)

Functional Manual Reaction® (FMR) is the utilization of authentic, functional drivers integrated with the skilled practitioner's hands. Authentic, functional drivers (including gravity, ground reaction, momentum, eyes, hands, feet, pelvis, and proprioceptors) are complemented by the practitioner's hands in order to effectively assess and facilitate movement. FMR evaluates and creates a three-dimensional physiological and biomechanical Chain Reaction® of the neuromusculoskeletal system consistent with the functional task. A practitioner certified in FMR demonstrates competency and proficiency in the knowledge (Principles), plan of action (Strategies), and activities (Techniques) for all forms of functional human movement.

## Prerequisites for FMR Certification

- Fellow in Applied Functional Science® (FAFS)
- Current GIFT Fellow / Participant in GIFT Program

## More on FMR:

Functional Manual Reaction® (FMR) is the name that Gray Institute uses to describe the application of hands to bone segments in order to facilitate an optimal sequence of motion during a functional movement. FMR is used during the clinical tasks of movement assessment, functional training, and rehabilitation. FMR can complement all aspects of movement analysis.

FMR is complementary because it is not a passive technique that exists by itself, but rather a technique used during active movements to enhance the three clinical tasks listed above. FMR is a very powerful and effective tool when utilized during functional movements. However, it cannot be effectively employed without a comprehensive foundation in Applied Functional Science® that includes: joint and muscle anatomy, tri-plane muscle function, biomechanics / kinematics, relative joint motions, and inter-segmental dynamics.

FMR can be used to assess movement restrictions caused by muscles and joints. In addition to eliminating identified movement restrictions, it can also be utilized to restore the proper sequencing of bone movements that is essential to effective and efficient task execution. FMR is frequently used to increase the load to a muscle during an eccentric contraction in order to enhance the muscle's concentric power. Whatever the purpose of the FMR technique, the actual application must be consistent with the principles of function so that the proprioceptive input is genuine. The proprioceptive information (direct by the hands, and indirection through the joint motion and muscle lengthening) must be what the body receives during actual functional activities.

FMR shares some aspects of Proprioceptive Neuromuscular Facilitation (PNF). PNF and FMR emphasize the three-dimensional nature of human movement, the role of hand contact in guiding bone movement, and the potential to increase muscle activation. FMR does not however require specific hand placement for efficacy. FMR, in contrast to PNF, is most commonly used with the client in an upright position so that the load and proprioceptive input produced by gravity are consistent with the functional activity.

The forces applied to bones during FMR are relatively gentle and carry little risk because they are consistent with the physiological movement that is occurring. During the FMR techniques, the hands can be placed on adjacent bones, but also can be placed so that they cross multiple joints. Because of this, FMR is not always specific to a particular joint, but it is always specific in each of the three planes to the particular activity, as well as what body parts are creating the motion.