Indications
- Distal radius fractures with metaphyseal/diaphyseal extension
- Highly comminuted distal radius fractures in the elderly
- Neutralization device
  - Radiocarpal fracture-dislocation or articular shear patterns
  - Multiple-trauma patient requiring weight-bearing through the upper extremities
  - Compromised soft-tissue

Technique
- 3 dorsal incisions
  - Metacarpal, Lister’s tubercle, Brachioradialis-ECRB/ECRL interval
  - Index vs. Long metacarpal
  - Reduction maneuver – traction and supination
  - Evaluation of digital ROM
- Removal at 3-4 months post-op (mean 119 days) for metaphyseal/diaphyseal patterns; sooner in metaphyseal distal radius patterns

Complications
- Digital stiffness
- Hardware failure
- CRPS
- Transient superficial radial neuritis
- Tendon injury

Outcomes
- Maintenance of radial length for all indications
- Highly comminuted fractures in the elderly
  - Mean flex/ext arc 96 deg, mean pron/supination 156 deg
  - Mean DASH 32
- Fractures with metaphyseal/diaphyseal comminution
  - Mean flex/ext arc 122 deg, mean pron/supination 153 deg
  - Mean DASH 11.5
- Duration of immobilization with distraction plate does not correlate with range of motion or DASH scores at 1 year post-operatively