

## **GLOSSARY**

**Allograft** – tissue transplanted into one individual from another individual from the same species. For example: a tendon (allograft) from a human donor transplanted into a recipient/patient with a knee injury.

**Autograft** – tissue transplanted from one part of the body to another in the same organism. For example, a patient's saphenous vein (autograft) used as graft material for the same patient's coronary by-pass procedure (CABG).

**Axon** – the part of a nerve cell (neuron) that transmits electrical signals to another cell, such as muscle or sensory cells. Depending on the location of the neuron, the length of the axon can vary widely and can be several feet in length.

**Basal lamina (also named endoneurium)** – the innermost tube or membrane layer of the nerve extracellular matrix which surrounds an individual axon and through which a regenerating axon grows.

**Conduit for nerve repair** – a natural or synthetic single tube-like structure used in tension-free peripheral nerve repair.

**Direct coaptation / direct repair** – a surgical procedure where two ends of an injured peripheral nerve are sutured together to attempt to restore nerve function. Direct coaptation can be an effective treatment for peripheral nerve injury when no tension is generated after suturing the nerve stumps.

**Distal** – the part situated furthest away from the central point of attachment. For example, the distal stump of a transected peripheral nerve is the nerve portion located closer to the target area relative to the injury site.

**Endoneurium (also named basal lamina)** – the innermost tube or membrane layer of the nerve extracellular matrix which surrounds an individual axon and through which a regenerating axon grows..

**Epineurium** – the outermost tube or membrane layer of the nerve extracellular matrix. Typically, it surrounds multiple fascicles where each fascicle contains multiple axons; forms nerve trunk and provides structural integrity to the nerve.

**Extracellular matrix (ECM)** – support scaffold outside of the cell which forms a series of concentric sheaths or tubes comprised of collagen and proteins.

**Fascicle** – an internal subdivision of the nerve surrounded by the perineurium.

**Nerve graft** – a tissue that is able to bridge the nerve gap, allowing nerve growth.

**Neuroma** – a mass / bundle of nerve fibers and scar tissue. Neuromas can be extremely painful to patients, and may require surgical intervention to alleviate the pain.

**Neuron** – the functional unit of the nervous system. It is also called the nerve cell.

**Perineurium** – nerve ECM sheath that encompasses multiple endoneurial tubes to form fascicles, bundles of endoneurial tubes.

**Proximal** – medical term for a point in the body located closer to the point of reference relative to another structure. For example, the proximal ending (stump) of a peripheral nerve is the portion located closest to the spinal cord relative to the injury site.

**Xenograft** – a surgical graft of tissue from one species to a different species. For example, bovine tissue (xenograft) implanted into a human.