WHAT IS CLAIMED IS:

1. A system for creating a protective barrier in situ around a nerve end or nerve to nerve junction, the system comprising:

a form comprising:

a sidewall defining a cavity and a top opening for accessing the cavity, the top opening configured to receive a first nerve end; and

a scaffold;

wherein the scaffold is configured to be at least partially positioned on a bottom interior surface of the sidewall of the form such that the first nerve end is offset from the bottom interior surface of the sidewall when the first nerve end is positioned on the scaffold within the cavity.

2. The system of claim 1, wherein the top opening is configured to receive a second nerve end, and wherein the second nerve end is offset from the bottom interior surface of the sidewall when the second nerve end is positioned on the scaffold within the cavity.

3. The system of claim 1, wherein the top opening is configured to receive a connection target, and wherein the connection target is offset from the bottom interior surface of the sidewall when the connection target is positioned on the scaffold within the cavity.

4. The system of claim 3, wherein the connection target is a prosthesis attachment point or a portion of non-nervous tissue.

5. The system of claim 1, wherein the top opening has a first cross-sectional area being less than a second cross-sectional area of the cavity.

6. The system of claim 1, wherein the form further comprises a first nerve guide comprising a first surface at least partially defining a first side access through the sidewall for positioning a first nerve end in the cavity, the first surface being on a first end of the form at a first elevated position relative to a bottom interior surface of the sidewall.

7. The system of claim 2, further comprising a second nerve guide comprising a second surface at least partially defining a second side access through the sidewall for positioning a second nerve end in the cavity, the second surface being on a second end of the form at a second elevated position relative to a bottom interior surface of the sidewall.

8. The system of claim 1, further comprising an in situ forming media configured to be introduced into the form and to form a protective barrier at least partially around a circumference of the first nerve end.

9. The system of claim 2, further comprising an in situ forming media configured to be introduced into the form and to form a protective barrier at least partially around a circumference of the first nerve end and second nerve end.

10. The system of claim 9, wherein the in situ forming media comprises a growth permissive gel configured to be introduced into a gap between the first nerve end and the second nerve end when the first nerve end and the second nerve end are positioned on the scaffold within the cavity of the form.

11. The system of claim 8, wherein the in situ forming media comprises a non-growth permissive gel configured to at least partially integrate into the scaffold, and wherein the in situ forming media is biodegradable.

12. The system of claim 1, wherein the scaffold comprises a technical textile, a knitted material, a warp knitted material, a woven material, a natural monofilament, polydioxanone, poly(lactic-co-glycolic acid), poliglecaprone, polyglactin, polyglycolic acid, polyglycolide fiber, polylactide fiber, collagen, alginate, chitosan, cellulose, or carboxymethylcellulose.

13. The system of claim 12, wherein the scaffold comprises polyglycolide fiber or warp knitted polyglycolide fiber.

14. The system of claim 1, wherein the scaffold is hydrophilic.

15. The system of claim 1, wherein the scaffold has a thickness of less than or equal to about 1 mm, about 0.8 mm to about 1.2 mm, or about 1 mm.

16. The system of claim 1, wherein the scaffold has a coefficient of friction of about 0.8 to 1.

17. The system of claim 1, wherein the scaffold has an elastic modulus of at least about 1 kPa, or between about 15 kPa to about 45 kPa.

18. The system of claim 1, wherein the scaffold has a tensile strength of at least about 10 N, or between about 70 N to about 100 N.

19. The system of claim 1, wherein the scaffold has a plurality of pores, and wherein the plurality of pores of the scaffold are each about 0.8 mm^2 to about 1.2 mm^2 in cross-sectional area.

20. The system of claim 1, wherein the scaffold is biodegradable.

21. The system of claim 1, wherein the scaffold has one or more pores and is formed of a woven material.

22. The system of claim 21, further comprising a growth permissive gel configured to be disposed between the first nerve end and a second nerve end.

23. The system of claim 22, wherein the one or more pores of the scaffold are sized to limit passage of the growth permissive gel therethrough.

24. The system of claim 21, further comprising a non-growth permissive gel configured to at least partially surround the nerve to nerve junction.

25. The system of claim 24, wherein the one or more pores of the scaffold are sized to permit passage of the non-growth permissive gel therethrough.