

**DANIEL J. LIEBL, Ph.D.**  
**University Of Miami**  
**Curriculum Vitae**

**I. PERSONAL**

2. Name: Daniel J. Liebl, Ph.D.
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4. Office Phone: (305) 243-7143; Fax (305) 243-3914
5. Home Address: 541 Alhambra Circle  
Coral Gables, FL 33134
6. Current Academic Rank: Tenured Professor
7. Primary Department: The Miami Project to Cure Paralysis, The Department of Neurological surgery
8. Secondary or Joint Appointments: None
9. Citizenship: USA
10. Visa Type: N/A

**II. HIGHER EDUCATION**

11. Institutional:
- |   |            |
|---|------------|
| Kent State University<br>Northeastern Ohio College of Medicine<br>Rootstown, OH | Ph.D. 1994 |
| Oral Roberts University<br>Tulsa, OK  | B.S. 1987  |
12. Non-Institutional: N/A
13. Certification, Licensure: N/A

**III. EXPERIENCE**

14. Academic

UM MD/PhD program (MSTP)	Associate Director	2020 - Present
The Miami Project to Cure Paralysis University of Miami Miller School of Medicine Miami, FL	Professor	2012 - Present
UM Neuroscience Graduate Program	Director, Chair	2008 - 2013
The Miami Project to Cure Paralysis University of Miami Miller School of Medicine Miami, FL	Associate Professor, Tenured	2007 - 2012
The Miami Project to Cure Paralysis University of Miami School of Medicine Miami, FL	Assistant Professor	2000 - 2007
UT Southwestern Medical Center Dallas, TX	Instructor	1997 – 2000
Laboratory of Dr. Luis Parada UT Southwestern Medical Center Dallas, TX	Postdoctoral Fellowship	1994 - 1997
Laboratory of Dr. Peter Koo Kent State University/ Northeastern Ohio Universities College of Medicine Rootstown, OH	Graduate Training in Neuroscience	1990 - 1994
Baylor College of Medicine Houston, TX	Research Technician	1988 - 1990
Oral Roberts University Tulsa, OK	Research Technician	1985 - 1987

15. Hospital Appointments: N/A

16. Non-Academic: N/A

17. Military: N/A

#### IV. PUBLICATIONS

18. Books and monographs published: Total 3.

Koo PH, **Liebl DJ**, Qui W-S, Hu Y-Q, Dluzen DE. Monoamine-activated (2-macroglobulin) inhibits neurite outgrowth, survival, choline acetyltransferase and dopamine concentration of neurons by blocking neurotrophin-receptor (trk) phosphorylation and signal transduction. IN: *Biology of (2-macroglobulin, its receptor and related proteins*. Borth V, Gonias SL, Feinman RD, Quigley J, Strickland DK (eds). Annals of New York Academy of Sciences (1994) 737:460-464.

Krull CE and **Liebl DJ**. Ephrins and Eph receptor tyrosine kinases in synapse formation. IN: *The Sticky Synapse*. James D. Russo (ed). Springer New York (2009) 333-345.

Theus MH and **Liebl DJ**. Endogenous Neurogenesis after Traumatic Brain Injury. IN: *Cellular Therapy for Stroke and CNS Injuries*. Zhao LR, Zhang JH (eds). Springer Series in Translational Stroke Research (2014). Chapter 10:3028.

19a. Juried or refereed journal articles and exhibitions (*Submission and revision*):

Arizanovska D, Folorunso OO, Jagad JR, Graciolli Cordeiro J, Balu DT, Wolosker H, Liebl DJ. (2023). Synaptic targeting and elimination between sexes in the traumatized brain. In preparation.

Diaz M., Watson M., Kunamneni M., **Liebl DJ**. (2023) TMEM97 functions to regulate cholesterol trafficking in neurons after traumatic brain injury. In preparation.

Wang H, Peng Z, Li Y, Sahn JJ, Chou T-H, Liu Q, Zhou X, Porciatti V, Liebl DJ, Martin SF, Wen R. (2022)  $\sigma$ 2R/TMEM97 in retinal ganglion cell degeneration. Submitted at Scientific Reports.

Díaz M, Tsenkina Y, Arizanovska D, MehlenP, Liebl DJ. (2022) DCC/netrin-1 regulates cell death in oligodendrocytes after brain injury. Revision at Cell Death and Differentiation.

19b. Juried or refereed journal articles and exhibitions (*Published*): Total 57.

Tapanes ST\*, Arizanovska D\*, Diaz MM, Folorunso OO, Harvey T, Brown SE, Radzishchsky I, Close LN, Jagad JR, Graciolli Cordeiro J, Wolosker H, Balu DT, Liebl DJ. (2022). Inhibition of Glial D-serine Release Rescues Synaptic Damage After Brain Injury. GLIA. 70:1133–1152. PMID: 35195906.

Shin MK, Vázquez-Rosa E, Koh Y, Dhar M, Chaubey K, Cintrón-Pérez CJ, Barker S, Miller E, Franke K, Noterman M, Seth D, Allen RS, Motz CT, Rao SR, Skelton LA, Pardue MT, Fliesler SJ, Wang C, Tracy TE, Gan L, **Liebl DJ**, Savarraj JPJ, Torres GL, Ahnstedt H, McCullough LD, Kitagawa RS, Choi HA, Zhang P, Hou Y, Chiang C-W, Li L, Orti F, Kilgore JA, Williams NS, Whitehair VC, Gefen T, Flanagan ME, Stamler JS, Jain MK, Kraus A, Cheng F, Reynolds JD, Pieper AA, (2021). Reducing acetylated tau is neuroprotective in brain injury. Cell, 13:2715-2732. PMID: 33852912; PMCID: PMC8491234.

Tsenkina Y\*, Tapanes S\*, Díaz MM, Titus DJ, Gajavelli S, Bullock R, Atkins CM, **Liebl DJ**. (2020) EphB3 interacts with initiator caspases and FHL-2 to activate dependence receptor cell death in oligodendrocytes after brain injury. Brain Communication. 18(2):fcaa175. \*co-first authors. PMID: 33305261; PMCID: PMC7713998.

Penas C, Maloof ME, Stathias V, Long J, Tan SK, Mier J, Fang Y, Valdes C, Rodriguez-Blanco J, Chiang CM, Robbins DJ, **Liebl DJ**, Lee JK, Hatten ME, Clarke J, and Ayad NG. (2019) Time-series Modeling of Cell Cycle Exit Identifies Brd4-dependent Regulation of Cerebellar Neurogenesis. *Nature Communications*. 10:3028. PMID: 31292434; PMCID: PMC662034.

Oudega M, Hao P, Shang J, Haggerty AE, Wang, Z, Sun J, **Liebl DJ**, Shi Y, Cheng L, Hongmei D, Sun Y, Xiaoguang L, Lemmon VP. (2019) Validation Study of Neurotrophin-3-releasing chitosan facilitation of neural tissue generation in the severely injured adult rat spinal cord. *Experimental Neurology* 312:51-62. PMID: 30471251.

Vázquez-Rosa E\*, Watson M\* , Sahn J, Hodges T, Schroeder R, Cintrón-Pérez C, Shin M-K; Yin T, Emery J, Martin S<sup>^</sup>, **Liebl DJ**<sup>^</sup>, Pieper A<sup>^</sup>. (2019) Neuroprotective Efficacy of a Novel Sigma 2 Receptor/TMEM97 Modulator (DKR-1677) after Traumatic Brain Injury. *ACS Chemical Neuroscience*. 10:1595-1602. \*co-first authors; <sup>^</sup>co-corresponding authors. PMID: 30421909; PMCID: PMC6862717.

Assis-Nascimento P, Tsenkina Y, Liebl DJ. (2018). EphB3 signaling induces cortical endothelial cell death and disrupts the blood-brain barrier after traumatic brain injury. *Cell Death and Disease, Nature*. 9:7. PMID: 29311672; PMCID: PMC5849033.

Perez EJ, Tapanas SA, Balmuth-Loris Z, Balu DT, Sick TJ, Coyle JT, **Liebl DJ**. (2017) Enhanced astrocytic D-serine underlies synaptic damage after traumatic brain injury. *Journal of Clinical Investigations*. 127(8):3114-3125. PMID: 28714867 PMCID: PMC5531405.

Laussu J, Audouard C, Kischel A, Assis-Nascimento P, Escalas N, **Liebl DJ**, Soula C, Davy A. (2017) Eph/ephrin signaling controls progenitor identities in the ventral spinal cord. *Neural Development*. 12:10. PMID: 28595615. PMID: 28595615; PMCID: PMC5463316.

Royet A, Broutier L, Cissieuz M-M, Malleval C, Gadot N, Maillet D, Goddard-Leon S, Bernet A, Nony P, Treilleux I, Honnorat J, **Liebl DJ**, Pelletier L, Berger L, Meyronet D, Castets M, Mehlen P. (2017) Ephrin-B3 supports glioblastoma growth by inhibiting apoptosis induced by the dependence receptor EphA4. *Oncotarget*. 8(14):23750-23759. PMID: 28423606; PMCID: PMC5410341.

Dixon KJ, Turbic A, Turnley AM, **Liebl DJ**. (2017) Explant Methodology for Analyzing Neuroblast Migration. *World Biomedical Frontiers, Neuroscience*, 7(9)e2249. PMID: 28725659; PMCID: PMC5512276.

Dixon KJ, Mier J, Gajavelli S, Turbic A, Bullock R, Turnley AM, **Liebl DJ**. (2016) EphrinB3 restricts endogenous neural stem cell migration after traumatic brain injury. *Stem Cell Res*. 17(3):504-513. PMID: 27771498; PMCID: PMC5512275.

Dixon KJ, Theus MH, Nelersa CM, Mier J, Travieso L, Tzong-Shiue Y, Kernie SG, **Liebl DJ**. (2016) Endogenous neural stem/progenitor cells stabilize the cortical microenvironment following traumatic brain injury. *World Biomedical Frontiers, Neuroscience*, June-July, 25.

Perez EJ, Cepero ML, Perez SU, Coyle JT, Sick TJ, **Liebl DJ**. (2016) EphB3 signaling propagates synaptic dysfunction in the traumatic injured brain. *Neurobiology of Disease*. 94:73-84. PMID: 27317833; PMCID: PMC5662938.

Assis-Nascimento P, Umland O, Cepero ML, **Liebl DJ**. (2016) A flow cytometric approach to analyzing endothelial cells and progenitors following traumatic brain injury. *J. Neurosci. Methods.* 263:57-67. PMID: 26854397; PMCID: PMC4801778.

Tsenkina Y, Ricard J, Runko, E, Travieso L, Quiala MM, **Liebl DJ**. (2015) EphB3 receptor functions as a dependence receptor to mediated oligodendrocyte cell death following contusive spinal cord injury. *Cell Death and Disease, Nature.* 6:10 e1922. PMID: 26469970; PMCID: PMC4632292.

Dixon KJ, Theus MH, Nelersa CM, Mier J, Travieso L, Tzong-Shiue Y, Kernie SG, **Liebl DJ**. (2015) Endogenous neural stem/progenitor cells stabilize the cortical microenvironment following traumatic brain injury. *J Neurotrauma.* 32(11):753-64. PMID: 25290253; PMCID: PMC4449704.

Lemmon VP, Ferguson AR, Popovich PG, Xu X-M, Snow DM, Igarashi M, Beattie CE, Bixby JL., Abeyruwan SW et al. (including **Liebl DJ**). (2014) Minimum Information About a Spinal Cord Injury Experiment (MIASCI) – a proposed reporting standard for spinal cord injury experiments. *Journal of Neurotrauma.* 31(15):1354-61. PMID: 24870067; PMCID: PMC4120647.

Theus MH, Ricard J, Glass SJ, Travieso L, **Liebl DJ**. (2014) EphrinB3 blocks the pro-apoptotic EphB3 dependence receptor functions following TBI. *Cell Death and Disease, Nature.* 8:5 e1207:1-11. PMID: 24810043; PMCID: PMC4047907.

Baumann G, Travieso L, **Liebl DJ**, Theus MH (2013). Pronounced hypoxia in the subventricular zone following traumatic brain injury and the neural stem/progenitor cell response. *Exp. Biol. and Med.* 238(7):830-41. PMID: 23828590

Johnstone JT, Morton PD, Jayakumar AR, Bracchi-Ricard V, Runko E, **Liebl DJ**, Norenberg MD, Bethea J. (2013) Reduced Extracellular Zinc Levels Facilitate Glutamate-Mediated Oligodendrocyte Death after Trauma. *J Neurosci. Res.* 91(6):828-37. PMID: 23553703; PMCID: PMC4120886.

Atkins CM, Cepero ML, Kang Y, **Liebl DJ**, Dietrich WD (2013). Effects of rolipram on histopathological outcome after controlled cortical impact injury in mice. *Neurosci. Lett.* 532:1-6. PMID: 23103712; PMCID: PMC3527646.

Nelersa CM, Barerras H, Runko E, Ricard J, Shi Y, Glass S, Bethea JR, Bixby J, Lemmon V, **Liebl DJ**. High-Content Analysis of Pro-Apoptotic EphA4 Dependence Receptor Functions using Small Molecule Libraries. *J Biomolecular Screening.* 17(6):785-795 (2012). PMID: 22492230; PMCID: PMC4380140.

Morton PD, Johnstone JT, Ramos AY, **Liebl DJ**, Bunge MB, Bethea JR Nuclear Factor- $\kappa$ B Activation in Schwann Cells Regulates Regeneration and Re-Myelination. *Glia* 60(4):639-50. (2012). PMID: 22275133; PMCID: PMC4120893.

Theus MH, Ricard J, **Liebl DJ**. Reproducible expansion and characterization of mouse neural stem/progenitor cells in adherent cultures derived from the adult subventricular zone. *Current Protocol in Stem Cell Biology.* Unit 2D.8 (2012). PMID: 22415840; PMCID: PMC3312298.

Zhuang Z, Huang J, Cepero ML, **Liebl DJ**. Eph signaling regulates gliotransmitter release. *Comm. & Integr. Biology.* 4(2):223-6. (2011). PMID: 21655447; PMCID: PMC3104586.

del Valle K, Theus MH, Bethea JR, **Liebl DJ**, Ricard J. Neural progenitors proliferation is inhibited by EphB3 in the developing subventricular zone. *Int. J. Dev. Neurosci.* 29:9-14. (2011). PMID: 20969945; PMCID: PMC3004986.

Zhuang Z, Yang B, Theus MH, Sick JT, Sick TJ, Bethea JR, **Liebl DJ**. EphrinBs regulate D-serine synthesis and release in astrocytes. *J Neurosci.* 30(47):16015–16024 (2010). PMID: 21106840; PMCID: PMC3073557.

Theus M, Ricard J, Bethea JR, **Liebl DJ**. EphB3 limits the expansion of neural progenitor cells in the SVZ by regulating p53 during homeostasis and following traumatic brain injury. *Stem Cells.* 28:1231-42 (2010). PMID: 20496368; PMCID: PMC2967180.

Fu ES, Zhang YP, Candiotti KA, Sagen J, Morton PD, **Liebl DJ**, Bethea JR, Brambilla R. Transgenic inhibition of glial NF-kappa B reduces pain behavior and inflammation after peripheral nerve injury. *Pain.* 148:509-518. (2010). PMID: 20097004; PMCID: PMC2853034.

Furne C, Ricard J, Cabrera JR, Pays L, Bethea JR, Mehlen P, **Liebl DJ**. EphrinB3 is an anti-apoptotic ligand that inhibits the dependence receptor functions of EphA4 receptors during adult neurogenesis. *BBA-Molecular Cellular Research*, 1793(2):231-238 (2009). PMID: 18948148; PMCID: PMC2631096.

Yu T-S, Zhang G, **Liebl DJ**, Kernie SG. Traumatic brain injury-induced hippocampal neurogenesis requires activation of early nestin-expressing progenitors. *J Neurosci.* 28(48):12901-12 (2008). PMID: 19036984; PMCID: PMC2605967.

Petit A., Kennedy TE, Sellers DL, **Liebl DJ**, Tessier-Lavigne M, Horner PJ. Adult spinal cord progenitor cells are repelled by netrin-1 in the embryonic and injured adult spinal cord. *PNAS*, 104(45):17837-42 (2007). PMID: 17978191; PMCID: PMC2077035.

Shembade, N, Harhay, NS, **Liebl DJ**, Harhaj, EW. Essential role for TAX1BP1 in the termination of TNF- $\alpha$ , IL-1 and LPS-mediated NF- $\kappa$ B and JNK signaling. *EMBO J*, 26(17):3910-22 (2007). PMID: 17703191; PubMed Central PMCID: PMC1994124.

Ricard J, Salinas J, Garcia L, **Liebl DJ**. EphrinB3 Regulates Cell Proliferation and Survival in Adult Neurogenesis. *Mol Cell Neurosci*, 31:713-722 (2006). PMID: 16483793.

Rodenas-Ruano A, Perez-Pinzon M, Green EJ, Henkemeyer M, **Liebl DJ**. Distinct roles for ephrinB3 in the formation and function of hippocampal synapses. *Dev Biology*, 292(1):34-45 (2006). PMID: 16466709.

Mendes SW, Henkemeyer M, **Liebl DJ**. Multiple Eph receptors and B-class ephrins regulate midline crossing of corpus callosum fibers in the developing mouse forebrain. *J Neurosci*, 26(3):882-892 (2006). PMID: 16421308.

Blitz-Huzinga C, Nelersa CM, Malhotra A, **Liebl DJ**. Ephrins and their receptors: Binding versus Biology. *IUBMB Life*. 56(5) 257-265 (2004). PMID: 15370889.

Ricard J and **Liebl DJ**. Neurogenesis: Is the adult stem cell young of old? *IUBMB Life*. 56(1): 1-6 (2004). PMID: 14992373.

Simpson PJ, Wang E, Moon C, Matarazzo V, Cohen DRS, **Liebl DJ**, Ronnett GV. Neurotrophin-3 signaling maintains maturational homeostasis within neuronal population in the olfactory epithelium. *Mol Cell Neurosci.* 24:858-874 (2003). PMID: 14697654.

Howard M, Rodenas-Ruano A, Henkemeyer M, Martin G, Lonsbury-Martin B, **Liebl DJ**. Eph receptor deficiencies lead to altered cochlear function. *Hearing Res*, 178(1-2):118-30 (2003). PMID: 12684184.

**Liebl DJ**, Morris C, Parada LF, Henkemeyer M. mRNA Expression of B-class Ephrins and their receptors in the neonatal and adult mouse CNS. *J Neurosci Res* 71:7-22 (2003). PMID: 12478610.

Simpson PJ, Miller I, Moon C, Hanlon A, **Liebl DJ**, Ronnett GV. Atrial Natriuretic peptide (CNP) induces a cell cycle switch from proliferation to differentiation in Neurotrophin-primed olfactory receptor neurons. *J Neurosci* 22(13):5536-51 (2002). PMID: 12097505.

**Liebl DJ**, Young W, Parada LF. Regulation of Trk receptors following contusion of the rat spinal cord. *Exp Neurol* 167:15-26 (2001). PMID: 11161589.

**Liebl DJ**, Klesse LJ, Tessarollo L, Waldman T, Parada LF. Loss of BDNF-dependent neural crest derived sensory neurons in NT-4/5 mutant mice. *PNAS* 97(5):2297-2302 (2000). PMCID: PMC15795.

Kernie SG\*, **Liebl\* DJ**, Parada LF. BDNF regulates eating behavior and locomotor activity in mice. *EMBO* 19(6):1290-2000 (2000). (\*) **Co-first authors**. PMCID: PMC305670.

**Liebl DJ\***, Mbiene JP\*, Parada LF. NT-4/5 mutant mice have deficiency in gustatory papillae and taste bud formation. *Dev Biology* 213:378-389 (1999). (\*) **Co-first authors**. PMID: 10479455.

McDonald JW, **APA Consortium** (Anderson A, Black IB, Broesamle C, Bunge MB, Choi DW, Cotman CW, Gage FH, Horner P, **Liebl DJ**, Parada LF, Roonprapunt C, Plant GW, Schwab ME). Repairing the damaged spinal cord. *Scientific American*, Sept. 281(3):64-73 (1999). PMID: 10467750.

Kahn MA, Kumar S, Chang R, **Liebl DJ**, Parada LF, deVellis J. Mice lacking NT-3, and its receptor TrkC, exhibit profound deficiencies in CNS glial cells. *GLIA* 26(3):153-165 (1999). PMID: 10384880.

Hu Y-Q, **Liebl DJ**, Dluzen DE, Koo PH. Inhibition of dopamine and choline acetyltransferase concentration in rat CNS neurons by rat alpha1- and alpha2-macroglobulin. *J Neurosci Res* 51:541-50 (1998). PMID: 9514208.

**Liebl DJ**, Tessarollo L, Palk ME, Parada LF. Absence of sensory neurons before target innervation in brain-derived neurotrophic factor-, neurotrophin 3-, and TrkC-deficient embryonic mice. *J Neurosci* 17:9113-9121 (1997). PMID: 9364058.

**Liebl DJ**, Koo PH. Monoamine-activated alpha2-macroglobulin inhibits choline acetyltransferase of embryonic basal forebrain neurons and reversal of the inhibition by NGF and BDNF but not NT-3. *J Neurosci Res* 38:407-414 (1994). PMID: 7523691.

**Liebl DJ**, Koo PH. Comparative binding of neurotrophins (NT-3, CNTF and NGF) and various cytokines to alpha2-macroglobulin. *Biochem Biophys Res Comm* 193(3):1255-1261 (1993). PMID: 7686751.

**Liebl DJ**, Koo PH. Serotonin-activated alpha2-macroglobulin inhibits neurite-outgrowth and survival of embryonic sensory and cerebral cortical neurons. *J Neurosci Res* 35:170-182 (1993). PMID: 7686585.

Koo PH, **Liebl DJ**. Inhibition of nerve growth factor-stimulated neurite outgrowth by methylamine-modified alpha2-macroglobulin. *J Neurosci Res* 31:678-692 (1992). PMID: 1374478.

de Jong A, Wang-Bennett LT, **Liebl DJ**, Coker NJ. Accumulation of neurofilament proteins in the regenerating facial nerve. *Restor Neur Neurosci* 3:149-156 (1991). PMID: 21551875.

Wang-Bennett LT, **Liebl DJ**, Bennett GN. Targeted neuronal lesion induced by photosensitizing dye. *Brain Res* 534:122-128 (1990). PMID: 1705848.

**20. Other works, publications and abstracts:**

Diaz MM, Carney BN, Desu HL, Martin S, Brambilla R, **Liebl DJ**. Cholesterol homeostasis after CNS injury and disease. NIH ONSAP (2021).

Diaz MM, Tsenkina Y, Arizanovska, Tapanes SA, Cepero ML, **Liebl DJ**. EphB3 and deleted in colorectal cancer (DCC) dependence receptors induce oligodendrocyte cell death in the traumatically injured brain. *Glial Biology in Medicine Conference* (2021).

Carney BN, Desu HL, Martin S, **Liebl DJ**, Brambilla R, Diaz MM. Ablation of TMEM97, a regulator of cholesterol homeostasis, improves functional recovery in the EAE model of multiple sclerosis. *ISNI Conference* (2021).

Ascona MC, Carney BN, Illiano P, Nissanka N, Desu HL, Mudalegundi S, **Liebl DJ**, Moraes CT, Brambilla R. Generation and characterization of Tre-TNFR2 mice, a novel gain-of-function transgenic for cell-specific overexpression of TNFR2. *INSI Conference* (2021).

Arizanovska D, Tapanes SA, Folorunso OO, Brown SE, Balu DT, **Liebl DJ**. Glial D-serine mediates synaptic loss and memory impairments caused by traumatic brain injury. *Keystone Conference* (2021).

Diaz MM, Tsenkina Y, Tapanes SA, Arizanovska D, Cepero ML, **Liebl DJ**. EphB3 and deleted in colorectal cancer (DCC) dependence receptors contribute to oligodendrocyte cell death after brain injury. *Glia Conference* (2021)

Tapanes SA, Arizanovska D, Cepero ML, Wolosker H, Balu DT, **Liebl DJ**. D-amino acid transporters regulate synaptic damage following traumatic brain injury (TBI). *Glia in Health & Disease Conference* (2020).

Kunamneni M, Diaz M, Watson MR, **Liebl DJ**. The role of TMEM97 in cell death after traumatic brain injury. *Life Sciences South Florida STEM Undergraduate Symposium at Florida International University* (2020).

Tapanes SA, Perez EJ, Balu DT, **Liebl DJ**. D-amino acid transporters regulate synaptic damage following traumatic brain injury. *Society for Neuroscience* (2019).

Tapanes S, Harvey T, Coyle J, Balu D, **Liebl DJ**. Dynamic regulation and implications of D-serine after brain injury. *IDAR* 2019.

Perez EJ, Balu DT, Sick TJ, Coyle JT, **Liebl DJ**. Switch in D-serine release from neurons to astrocytes underlies synaptic damage associated with brain injury. *IDAR* 2017.



Kerr N, Zambrano R, Kaur H, Vaccari JPD, **Liebl DJ**, Wu S, Bancalari E, Keane RW, Dietrich WD. Aim2 inflammasome signaling in traumatic brain injury-induced acute lung injury. Society of Neurotrauma, J Neurotrauma 33(13):A121 (2016).

Tsenkina Y, Ricard J, Runko E, Quiala-Acosta MM, Mier J, **Liebl DJ**. EphB3 Receptors Function as Dependence Receptors to Mediate Oligodendrocyte Cell Death Following Contusive Spinal Cord Injury. Society for Neuroscience (2015).

Dixon KJ, Perez E, Mier J, Turbic A, Turnley AM, Gajabelli S, Bullock R, Liebl DJ. EphrinB3 restricts endogenous NSC migration after traumatic brain injury. Society for Neuroscience (2015).

Perez EJ, Cepero ML, **Liebl DJ**. EphB3 regulates gliotransmission following traumatic brain injury. GLIA (2015).

Dixon KJ, Perez E, Mier J, Turbic A, Turnley A, **Liebl DJ**. Ephrin-B3 restricts endogenous neural stem cell migration in the peri-lesional region following traumatic brain injury. Society for Neuroscience. (2015).

Laussu J, Audouard C, Assis-Nascimento P, Escalas N, **Liebl DJ**, Soula C, Davy A. Antagonistic Eph:ephrin signaling patterns the ventral neural tube. Societies of Developmental Biologists. (2015).

Balu DT, Perez EJ, Takagi S, Coyle JT and **Liebl DJ**. Traumatic brain injury induces astrocytic serine racemase expression and D-serine localization *in vivo*. Society for Neuroscience (2014).

Laussu J, Audouard C, Assis-Nascimento P, Escalas N, **Liebl DJ**, Soula C and Davy A. Eph/ephrin signaling controls progenitor fate at the pMN/p3 domain boundary in the spinal cord. Development and regeneration of the spinal cord Workshop. Sitges, Spain (2014).

**Liebl DJ**, Ricard J, Nelersa C, Theus MH. Dependence receptors participate in CNS injury progression. 5<sup>th</sup> Dependence receptor meeting, Les Menuires, France (2014).

Jimshelishvili S, Ricard J, Nelersa C, **Liebl DJ**. Identifying interactions between EphB3 and EphA4 dependence receptors using bimolecular fluorescence complementation. Journal of Neurological Sciences (2013).

Dixon KJ, Theus MH, Mier J, Kernie SG, **Liebl DJ**. Residential neural stem/progenitor cells promote sparing following traumatic brain injury. Neurotrauma Society (2012).

Atkins CM, Cepero M, Sequeira D, **Liebl DJ**, Dietrich WD. Effects of rolipram on outcome after controlled cortical impact in mice. Neurotrauma Society (2012).

Theus MH, Glass SJ, Travieso L, **Liebl DJ**. Neuroprotective effects of ephrinB3 following traumatic brain injury. Neurotrauma Society (2011).

Johnstone JT, Morton PD, Jayakumar AR, Johnstone AL, Bracchi-Ricard C, Runko E, Patel S, Pearse DD, **Liebl DJ**, Morenberg MD, Bethea JR. Oligodendrocyte-NADPH Oxidase activation results in Oligodendrocyte death in a model of spinal cord injury. Glia 59(1):S61 2011.

Zhuang Z, **Liebl DJ**. Eph receptors are novel regulators of gliotransmitters in astrocytes. 10th European meeting on Glial Cells in Health and Disease, Prague, Czech (2011).

Theus MH, Ricard J, Kernie SG, **Liebl DJ**. EphB3 limits the expansion of neural stem/progenitor cells in the SVZ by regulating p53 during homeostasis and following brain injury. 8<sup>th</sup> World Congress IBRO, Florence Italy (2011).

Zhuang Z, Huang J, Cepero ML, **Liebl DJ**. EphrinB3 regulates the release of gliotransmitters in astrocytes. 10th International Neurotrauma Symposium, Shanghai China (2011)

Glass SJ, Zhuang Z, Theus MH, **Liebl DJ**. The pro-inflammatory role of eph receptors following spinal cord injury. Society for Neurosci. (2010).

Theus MH, Ricard J, Bethea JR, Kerne SG, **Liebl DJ**. EphB3 limits the expansion of neural stem/progenitor cells in the SVZ by regulating p53 during homeostasis and following brain injury. Neurotrauma Society (2010).

Ricard J, Hedrick-Theus M, Runko E, **Liebl DJ**. Eph receptors are new pro-apoptotic dependence receptors during adult neurogenesis and following CNS injury. Keystone Symposium (2009).

**Liebl, DJ**. Eph receptors function as novel pro-apoptotic receptors following CNS injury. 7<sup>th</sup> International Symposium on Experimental Spinal Cord Repair and Regeneration (2009).

Zhuang Z, Huang J, Nelersa C, Sagen J, **Liebl DJ**. Eph receptors mediate gliotransmitter release from astrocytes. Society for Neuroscience (2008).

Rodenas-Ruano A, Bracchi-Ricard V, Garcia L, **Liebl DJ**. EphrinB3 activation of EphA4 regulates NMDA receptor exocytosis in murine hippocampal neurons. Society for Neuroscience (2008).

Runko E, Ricard J, **Liebl DJ**. Eph receptors mediate apoptosis following spinal cord injury. Cold Spring Harbor (2008).

Hedrick-Theus M, Ricard J, **Liebl DJ**. Pro-apoptotic Function for Eph Receptors during Adult Neurogenesis and following CNS Injury. Society for Neurotrauma (2008).

Hedrick-Theus M, Ricard J, **Liebl DJ**. Pro-apoptotic Function for Eph Receptors during Adult Neurogenesis and following CNS Injury. Christopher and Daina Reeve Foundation Symposia (2008).

Ricard J, Salinas J, **Liebl DJ**. EphrinB3 and its receptor EphA4 control adult subventricular zone neurogenesis International Society for Development Neuroscience. (2008).

Hedrick-Theus M, Baumann G, Ricard J, **Liebl DJ**. EphB3 receptor restricts proliferation of neural stem/progenitor cells in the adult SVZ and under hypoxic culture conditions. Keystone Symposia. (2008).

Hedrick-Theus M, Baumann G, **Liebl DJ**. The role of EphB receptors in endogenous neural stem cell functions after traumatic brain injury. UM Neuroscience Day Abstract. (2007).

Shah S, Salinas J, Ricard J, **Liebl DJ**. The role of Eph receptors in stem cell differentiation. UM Neuroscience Day Abstract. (2007).

Ricard J, Furne C, Salinas J, Pays L, Mehlen P, and **Liebl DJ**. EphA4 is a new dependence receptor and controls cell survival in the adult subventricular zone. Society for Neurosci. (2005).

Mendes S and **Liebl, DJ**. Multiple B-class ephrins and Eph receptors regulate midline axon guidance in the developing mouse forebrain. Society for Neurosci (2005).  
Voluntary

Rodenas-Ruano A, Dashkin O, and **Liebl DJ**. The role of EphB1 receptors in the hippocampus. Society for Neurosci (2005).  
Voluntary

Ricard J, Furne C, Salinas J, Pays L, Mehlen P, and **Liebl DJ**. EphA4 receptor controls cell survival in the adult subventricular zone. Christopher Reeve's Paralysis Association Symposium (2005).  
Voluntary

Mendes S and **Liebl DJ**. Corpus callosum axon guidance: The role of ephrins and Eph receptors. Keystone Symposia. (2005).  
Refereed

Rodenas-Ruano A, Green EJ, Perez-Pinzon M, **Liebl DJ**. The Role of EphrinB3 in Synaptic Function. American Psychological Association/ Diversity Program in Neuroscience Pre-doctoral Fellowship (2004).  
Voluntary

Blitz-Huizinga C, Nelersa CM, Malhotra A, **Liebl DJ**. Ephrins and their receptors: Binding versus Biology. IUBMB Life. 56(5): Cover Art. (2004).  
Refereed

Loizides AM, Huizinga C, Grand R, **Liebl DJ**, Montgomery R. Eph/ephrin family of receptors and ligands: Expression in small intestinal epithelial cells and possible stem cell markers. 2nd World Congress of Pediatric Gastroenterology (2004).  
Voluntary

Ricard, J and **Liebl DJ**. Neurogenesis: Is the adult stem cell young of old? IUBMB Life. 56(1): Cover Art (2004).  
Refereed

Young KC, Devia C, Vazquez-Padron R, Pham S, Ruiz P, **Liebl DJ**, Suguihara C.. The effect of ephrin receptor expression on susceptibility to pulmonary hypertension in mice. Soc. Pediatric Res. Abstr (2004).  
Voluntary

Ricard J, Salinas J, and **Liebl DJ**. The role of ephrins and Eph receptors in adult neurogenesis. Miami Nature Biotechnology Winter Symposium (2004).  
Voluntary

Ricard J, Salinas J, and **Liebl DJ**. The role of ephrins and Eph receptors in adult neurogenesis. Soc. Neurosci. Abstr (2003).  
Voluntary

Mendes SW and **Liebl DJ**. Corpus callosum axon guidance: The role of ephrins and Eph receptors. Soc. Neurosci. Abstr (2003).  
Voluntary

Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

Rodenas-Ruano A, Huizinga C, Wu E, Perez-Pinzon M, Green E, and **Liebl DJ**. Ephrin-B3 and EphB1 receptor deficiencies leads to defects in synaptic functions in the hippocampus. Soc. Neurosci Abstr (2003).  
Voluntary

Desir M, Green EJ, **Liebl DJ**, Baskin YK, Huizinga C, Helmy FM. Behavioral analysis of ephrin and Eph receptor mutant mice. Annul biomedical research conference for minority students (2002).  
Voluntary

Howard MJ, Rodenas-Ruano AI, Candrea C, Martin GK, Lonsbury-Martin BL, **Liebl DJ**. Eph-receptor deficiencies lead to altered cochlear function. Abstr Assoc Res Otolaryngol 25, 66 (2002).  
Voluntary

Kernie SG, Liebl DJ, Paradat LF. Reduction of brain derived neurotrophic factor causes obesity and hyperactivity: Implications for WAGR syndrome. Ped Res 45(4): 237 part 2 (1999).  
Voluntary

**Liebl DJ**, Kernie SG, Parada LF. BDNF regulates eating behavior and locomotor activity in mice. Soc Neurosci Abstr 25:2281 (1999).  
Voluntary

**Liebl DJ**, Klesse LJ, Parada LF. NT-4/5 is required for the development of BDNF responsive neurons in sensory ganglia. Soc Neurosci Abstr 24:1043 (1998).  
Voluntary

Kumar S, Kahn MA, **Liebl DJ**, Parada LF, de Vellis J. Significance of NT-3 in oligodendrocyte progenitor cells. Soc Neurosci Abstr 24:797 (1998).  
Voluntary

Shin C H, **Liebl DJ**, Parada LF, Henkemeyer M. EPH receptors regulate the migration of motor and sensory axons in the spinal cord. Axonal guidance meeting (1998).  
Refereed

**Liebl DJ**, Klesse L, Parada LF. Function of NT-4/5 in the developing dorsal root ganglia. Soc Neurosci Abstr 23:617 (1997).  
Voluntary

Chen S, **Liebl DJ**, Parada LF, Llinas R, Hillman D. Marked developmental impairment in the forebrain and diencephalon of BDNF and NT-3 knockout mice. Soc Neurosci Abstr 23:1427 (1997).  
Voluntary

Lee P-G, Hu Y-Q, **Liebl DJ**, PH Koo. Alpha-2-macroglobulin homologues mediating nerve degeneration and regeneration. Amer Soc Biochem Mol Biol (1997).  
Voluntary

**Liebl DJ**, Klesse L, Colvin S, Parada LF. Function of neurotrophins in subpopulations of developing DRG neurons. Soc Neurosci Abstr 22:998 (1996).  
Voluntary

**Liebl DJ**, Hu Y-Q, Dluzen DE, Koo PH. Effect of alpha-2-macroglobulin (2M) versus (1M) on monoamine-neurotransmitter systems, axonal growth and the survival of cerebral neurons. Amer Soc Biochem Mol Biol A1302 (1994).

Voluntary

Hu Y-Q, **Liebl DJ**, Koo PH. Inhibition of Trk- $\beta$  autophosphorylation of rat embryonic frontal cortex neurons and human neuroblastoma SY5Y cells by monoamine-activated  $\alpha_2$ -macroglobulin. Soc NeuroSci 20:37 (1994).

Voluntary

**Liebl DJ**, Koo PH. Alpha<sub>2</sub>-macroglobulin specifically binds NGF and NT-3, and can decrease choline acetyltransferase activity in developing basal forebrain neurons. Soc Neurosci Abstr 19:255 (1993).

Voluntary

**Liebl DJ**, Koo PH. Alpha<sub>2</sub>-macroglobulin, a carrier of neurotransmitters, forms an inhibitory complex interfering with NGF-dependent neurite outgrowth and survival of CNS neurons. Soc Neurosci Abstr 18:615 (1992).

Voluntary

Koo PH, **Liebl DJ**. Monoamine-modified  $\alpha_2$ -macroglobulin inhibits neurite outgrowth of embryonic sensory neurons, cerebral cortical neurons and pheochromocytoma PC12 cells. FASEB J 6:A1898 (1992).

Voluntary

Koo PH, **Liebl DJ**. Alpha<sub>2</sub>-macroglobulin reacted with monoamines modulates neurite outgrowth of embryonic sensory neurons, cerebral cortical neurons and pheochromocytoma PC12 cells in culture. In: Growth Factors, Peptides and Receptors Symposium. 12:46 (1992).

Voluntary

**Liebl DJ**, Koo PH. Inhibition of NGF-stimulated neurite outgrowth by amine-modified  $\alpha_2$ -macroglobulin. Soc Neurosci Abstr 17:1496 (1991).

Voluntary

de Jong A, Wang-Bennett LT, **Liebl DJ**. Accumulation of neurofilament proteins in the regenerating facial nerve. Soc Neurosci Abstr 17:49 (1991).

Voluntary

Wang-Bennett LT, Slaughter DP, **Liebl DJ**, Moore S. Accumulation of apolipoprotein A-1 and E in the rabbit facial nerve following transection and nerve repair. Soc Neurosci Abstr 16:164 (1990).

Voluntary

Wang-Bennett LT, de Jong A, **Liebl DJ**. Changes in cytoskeletal proteins in rabbit facial nerve following axotomy. I: Immunoblotting. Assoc Res Otolaryng 13:205-206 (1990).

Voluntary

Wang-Bennett LT, **Liebl DJ**. Target nerve lesion induced by photosensitizing dyes: A novel model for studying nerve degeneration-regeneration. Soc Neurosci Abstr 15:334 (1989).

Voluntary

Wang-Bennett LT, **Liebl DJ**, Coker NJ. Restoration of somatotopic organization during facial nerve regeneration: 3-D reconstruction. Assoc Res Otolaryng 11:199-200 (1988).

Voluntary

21. Other works accepted for publication: N/A

## **V. PROFESSIONAL**

### 22. Funded Research Performed

Grant Title: **“Stabilizing the tripartite synaptic complex following TBI”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Co-Investigator: Darrick Balu, PhD (subcontract)  
Agency: NIH/NINDS: R01 NS098740  
Type: Active; 04/01/2017-12/31/2021  
Direct Cost per Year / Effort % \$324,445/30% effort  
Major Goals: The goal is to examine the role of gliotransmitters on the trisynaptic circuitry after TBI.

Grant Title: **Minority fellowship supplement to “Stabilizing the tripartite synaptic complex following TBI”**  
Principal Investigator: Maureen Ascona  
Mentor: Daniel J Liebl, Ph.D.  
Agency: NIH/NINDS: Supplement to R01 NS098740  
Type: Active; 01/01/2020-12/31/2021  
Direct Cost per Year / Effort % \$111,277/0% effort  
Major Goals: The goal is to examine the role of gliotransmitters on the trisynaptic circuitry after TBI.

Grant Title: **“Epigenetic Pathways and Cell Cycle Exit”**  
Principal Investigator: Nagi Ayad, Ph.D.  
Co-Investigator: Daniel J. Liebl, Ph.D.  
Agency: NIH/NINDS: R01 NS118023  
Type: Active; 07/01/2020-06/30/2025  
Direct Cost per Year / Effort % \$250,000/3% effort  
Major Goals: The goal of this grant is to elucidate the role of Brd4 in regulating cerebellar development and medulloblastoma.

Grant Title: **“Role of astrocytic TNF receptor 2 in synaptic stability and cognitive function after traumatic brain injury”**  
Principal Investigator: Roberta Brambilla, Ph.D.  
Co-PI: Daniel J. Liebl, Ph.D.  
Agency: NIH/NINDS: R21NS120028  
Type: Active; 09/15/20- 09/14/22  
Direct Cost per Year / Effort % \$135,000/3% effort  
Major Goals: The goal is to investigate the role of astrocytic TNF receptor type 2 on synaptic stability and cognitive function after TBI.

Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

Grant Title: **“Bridging the gap between discovery science and human TBI patients”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Co-PI: Joacir Graciolli Cordeiro, M.D./Ph.D.  
Agency: Miami Project General Revenue Pilot Awards  
Type: Active; 07/01/20- 06/30/22  
Direct Cost per Year / Effort % \$147,334/0% effort  
Major Goals: Examine transcriptomics in human TBI patients.

Grant Title: **“Stabilizing the tripartite synaptic complex following TBI”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: Dean’s Bridge Funds  
Type: Active; 09/01/21- 08/31/22  
Direct Cost per Year / Effort % \$50,000/0% effort  
Major Goals: Examine transcriptomics in human TBI patients.

Pending Funding:

Past Funding:

Grant Title: **“A Novel Combination Strategy for Protection and Repair after TBI”**  
Principal Investigator: W. Dalton Dietrich, Ph.D.  
Co-Investigator: Daniel J. Liebl, Ph.D.  
Agency: NIH/NINDS: R01 NS089443  
Type: Active; 07/01/2015-06/30/2020  
Direct Cost per Year / Effort % \$250,000/15% effort  
Major Goals: The goal is to investigate the efficacy of combining hypothermia and pharmacological interventions to preserve hippocampal neurogenesis and cognitive recovery following TBI.

Grant Title: **Minority fellowship supplement to “Stabilizing the tripartite synaptic complex following TBI”**  
Principal Investigator: Stephen Tapanas  
Mentor: Daniel J Liebl, Ph.D.  
Agency: NIH/NINDS: Supplement to R01 NS098740  
Type: Active; 01/01/2018-12/31/2019  
Direct Cost per Year / Effort % \$111,277/0% effort  
Major Goals: The goal is to examine the role of gliotransmitters on the trisynaptic circuitry after TBI.

Grant Title: **“Stabilizing the tripartite synaptic complex following TBI”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Agency: University of Miami Equipment Grant  
Type: Active; 04/01/2017-03/31/2018  
Direct Cost per Year / Effort % \$3,239  
Major Goals: This internal grant will provide budget relief in replacing a cell culture centrifuge.

Grant Title: **“Modulating Post-Injury Gliotransmitter levels Leads to Improved Synaptic Function”**  
Principal Investigator: Enmanuel J Perez.  
Mentor: Daniel J. Liebl, Ph.D  
Agency: NIH-NINDS 1F31 NS089335-01  
Type: Active; 07/01/2014-06/30/2018  
Direct Cost per Year \$48,120  
Total Cost per Year / Effort % 100% effort  
Major Goals: The major goal of this project is to examine the role of synaptic interactions (i.e. neuronal and glial), transmitters and synaptic remodeling following traumatic brain injury.

Grant Title: **“A novel mechanism of cell death in the traumatic injured brain”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Agency: University of Miami SAC Bridge funds  
Type: Active; 11/01/2017-10/31/2018  
Direct Cost per Year / Effort % \$30,000  
Major Goals: This internal grant will provide bridge funding to support animal and supply costs to re-submission my NIH/NINDS grant application entitled “A novel mechanism of cell death in the traumatic injured brain”.

Grant Title: **“Molecular Mechanisms of Synaptic Dysfunction following TBI”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Co-Investigator: W. Dalton Dietrich, Ph.D., Helen Bramlett, PhD  
Agency: UM Dean’s Bridge Funding Program  
Type: Active; 08/01/2015-07/31/2016  
Direct Cost per Year / Effort % \$69,223/0% effort  
Major Goals: Based on a NIH/NINDS R01 NS091264-01A1 score in the 16<sup>th</sup> percentile. The goals is to examine the role of serine racemase and Eph receptors in regulating synaptic integrity and remodeling following mild-moderate TBI.

Grant Title: **“Ephrins regulate stem cell proliferation following TBI”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: NIH, NINDS: 1 R01 NS049545-01A6  
Type: Active; 08/01/2005-01/31/2016  
Requested Direct Cost per Year \$250,000.00  
Effort %: 35% effort  
Major Goals: The major goal of this project is to examine the role of ephrins and Eph receptor in regulating cell proliferation following traumatic brain injury.

Grant Title: **“Imaging in CNS”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: UM Research Education and Innovative Medicine (RIM) Internal Award Committee  
Type: Active; 07/01/14-06/30/15  
Total Cost / Effort %: \$12,926/0% effort  
Major Goals: Repair microscope and replace filters and upgrade workstation.



Grant Title: **“Eph receptors regulate vascular growth following traumatic brain injury”**  
Principal Investigator: Poincyane Assis-Nascimento, MS.  
Mentor: Daniel J. Liebl, Ph.D  
Agency: NIH-NINDS 1F31NS089325-01  
Type: Active; 07/01/2014-06/30/2015  
Direct Cost per Year \$42,676  
Total Cost per Year / Effort % 100% effort  
Major Goals: The major goal of this project is to examine the role of ephrins and Eph receptor in regulating vascular growth and remodeling following traumatic brain injury.

Grant Title: **“Battlefield Exercise & Combat Related SCI Research: Neuroprotection & Repair After SCI”**  
Principal Investigator: W. Dalton Dietrich, Ph.D.  
Co-Principal Investigator: Daniel J. Liebl, Ph.D. (Project 2)  
Agency: US Army: W81XWH-05-1-0061  
Type: Active; 08/01/2005-02/28/2015  
Direct Cost per Year \$92,335  
Total Cost per Year / Effort % \$266,833/15% effort  
Major Goals: The major goal of this grant is to use high throughput iRNA approaches to identify potential therapeutic targeted for Eph receptor signaling as they function as dependence receptors.

Grant Title: **“Mechanisms of Recovery Following Traumatic Brain Injury”**  
Principal Investigator: W. Dalton Dietrich, Ph.D.  
Co-Principal Investigator: Daniel J. Liebl, Ph.D. (Project 1)  
Agency: NIH/NINDS: 2P50NS030291-16A2  
Type: Active; 08/01/2009-07/31/2014  
Direct Cost per Year \$825,001.00  
Total Cost per Year/ Effort % \$ 1,259,846/30% effort  
Major Goals: The major goal of this grant is to examine the role of ephrins and Eph receptors in hippocampal astrocytes as it relates to synaptic plasticity.

Grant Title: **“A novel Eph receptor-mediated mechanism of cell death following spinal cord injury”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: The Craig H Neilsen Foundation (award #220886)  
Type: Active; 07/01/12-06/30/14  
Total Cost / Effort %: \$300,000/8% effort  
Major Goals: Examine the role of Eph receptors as dependency “death’ receptors following SCI.

Grant Title: **“Remodeling vascular networks following traumatic brain injury”**  
Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: UM Scientific Award Committee Pilot Study  
Type: Active; 06/01/13-05/31/14  
Total Cost / Effort %: \$20,000/0% effort

- Major Goals: Examine the role of EphB3 in regulating vascular remodeling after TBI.
- Grant Title: **“Eph receptor mediates oligodendrocyte apoptosis after spinal cord injury”**
- Principal Investigator: Erik Runko, PhD.  
Co-PI (Mentor): Daniel J Liebl, Ph.D.  
Agency: Christopher and Diana Reeves Foundation, Fellowship Award  
Dates: 01/01/08-12/31/10  
Direct Cost per Year: \$67,500  
Total Cost / Effort %: \$150,000/0% effort  
Major Goal: The goal of this project is to examine the role of ephrins and Eph receptors in oligodendrocyte survival in murine and non-human primate cells.
- Grant Title: **“Ephrin/Eph receptors regulate stem cell functions in SCI transplant model”**
- Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: Craig H. Neilsen Foundation  
Type: 12/12/06 – 12/11/08  
Direct Cost: \$124,747  
Total Cost / Effort %: \$258,000/10% effort  
Major Goals: The major goal of this project is to examine the role of ephrins and Eph receptor in regulating stem cell functions following transplantation into the injured spinal cord.
- Grant Title: **“Eph receptors are new and novel regulators of cell survival following spinal cord injury”**
- Principal Investigator: Daniel J. Liebl, Ph.D.  
Agency: Ralph C. Wilson, Sr./Ralph C. Wilson, Jr. Medical Research Foundation  
Type: 1/1/06 – 12/31/07  
Direct Cost / Indirect Cost: \$181,818/\$18,182  
Total Cost / Effort %: \$200,000/5% effort  
Major Goals: The major goals of this project are to examine whether ephrins and Eph receptors regulate apoptosis following spinal cord injury.
- Grant Title: **“EphB3 plays a role in hypoxia-mediated cell death and proliferation of adult neural stem/progenitor cells”**
- Principal Investigator: Gisela Katharina Baumann  
Co-PI (Mentor): Daniel J Liebl, Ph.D.  
Agency: Boehringer Ingelheim Fonds  
Dates: 04/01/07-10/30/07  
Direct Cost / Indirect Cost: \$9,600/\$0  
Total Cost / Effort %: 0% effort  
Major Goal: The goal of this project is to examine the role of EphB3 on the proliferation and survival of adult neural stem cells following hypoxia.
- Grant Title: **“The function of ephrins and Eph receptors in synaptogenesis and long term potentiation in the hippocampus”**
- Principal Investigator: Alma Rodenas-Ruano  
Co-PI (Mentor): Daniel J Liebl, Ph.D.

Agency: American Psychological Association, Minority Fellowship Program  
Dates: 07/01/04-06/30/06  
Direct Cost / Indirect Cost: \$41,544/\$0  
Total Cost / Effort %: \$41,544/0% effort  
Major Goal: The goal of this project is to examine the role of ephrinB3 and EphB1 on synaptic function in the hippocampus.

Grant Title: **“Plasticity in the hippocampus following TBI”**  
Program Project Grant PI: W. Dalton Dietrich, Ph.D.  
Principal Investigator Project 3: Daniel J. Liebl, Ph.D.  
Agency: NIH, NINDS; 5P50 #NS30291-10  
Type: Active; 06/01/2002-05/31/2007  
Project 3 Direct Cost / Indirect Cost: \$844,347/\$425,215  
Total Cost / Effort %: \$1,269,562/20% effort  
Major Goals: The major goals of this project are examine the function of ephrins and Eph receptors in mossy fiber plasticity of the adult and TBI injured hippocampus.

Grant Title: **“Ephrins and cell cycle following traumatic brain injury”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Agency: Ralph C. Wilson Medical Research Foundation  
Type: Active; 1/1/04-12/31/05  
Direct Cost / Indirect Cost: \$181,818/\$18,182  
Total Cost / Effort %: \$200,000/5% effort  
Major Goals: The major goals of this project are to examine whether ephrins and Eph receptors regulate stem cell proliferation following traumatic brain injury.

Grant Title: **“Neuronal plasticity of the hippocampus following ischemic stroke injury”**  
Principal Investigator: Daniel J Liebl, PhD  
Agency: Florida Department of Health, Biomedical Research Program  
Type: Active; 6/1/2001-6/30/2004  
Direct Cost / Indirect Cost: \$568,586/\$28,430  
Total Cost / Effort %: \$597,016/30% effort  
Major Goal: The major goal of this project is to examine the function of ephrinB3 and EphB1 in the hippocampus following ischemic stroke injury.

Grant Title: **“Ephrins and Eph receptors function to regulate gliogenesis”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Agency: Stanley J. Glaser Foundation  
Type: Active; 1/1/02-12/31/02  
Direct Cost / Indirect Cost: \$30,000/\$0  
Total Cost / Effort %: \$30,000/3% effort  
Major Goals: The major goals of this project are to examine the function of ephrins and Eph receptor in stem/progenitor cell gliogenesis.

Grant Title: **“Mechanisms of recovery following traumatic brain injury (Minority Supplement for Alma Rodenas-Ruano)”**  
Principal Investigator: Daniel J Liebl, Ph.D.  
Agency: NIH, NINDS: 1 P50 NS30291-12S1

Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

Dates: 07/01/03-06/30/04  
Direct Cost / Indirect Cost: \$24,988/\$12,869  
Total Cost / Effort %: \$37,857/0% effort  
Major Goals: The goal of these experiments was to examine the function of ephrinB3 in the hippocampus synapse.

Grant Title: **“Multiple B-class ephrins and Eph receptors regulate midline axon guidance in the developing mouse forebrain”**

Principal Investigator: Shannon Mendes  
Co-PI (Mentor): Daniel J Liebl, Ph.D.  
Agency: American Psychological Association, Minority Fellowship Program  
Dates: 07/01/03-06/30/05  
Direct Cost / Indirect Cost: \$41,544/\$0  
Total Cost / Effort %: \$41,544/0% effort  
Major Goals: The goal of these studies was to examine the role of ephrins and Eph receptors in regulating midline guidance of the developing corpus callosum.

23. Editorial Responsibilities Journal of Neuroestoratology: Editorial board member

24. Professional and Honorary Organizations

2008 - Present New Jersey Commission on Brain Injury Research (NJC BRI) grant review panel  
2005, 2009 Chaired NJCSCR grant review panel  
2003 – Present New Jersey Commission on Spinal Cord Research (NJCSCR) grant review panel  
2000 - 2015 Neurotrauma Society (member)  
1990 - 2015 Society for Neuroscience (member)  
1995 - 2000 Christopher Reeve Paralysis Foundation Consortium (member)

25. Honors and Awards

2001 Stanley J. Glaser Foundation Award  
1993, 1994 Graduate Student Senate Research Award  
1993 Kent State University Fellowship Award  
1994 Dissertation Award

26. Post Doctoral Fellowships

1994 - 1997 Postdoctoral fellowship  
UT Southwestern Medical Center  
Dallas, TX

27. Other Professional Activities

2019 Speaker, Topic “Dynamic regulation and implications of D-serine after brain injury”. IDAR 2019 conference, Tokyo Japan.  
2018 Speaker, Topic “New neuroprotective treatments for traumatic brain injury”. McLean Hospital, Harvard School of Medicine. Boston, MA, USA.  
2017 IDAR2017 Conference (Invited speaker), Italy.

Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

- 2014 Speaker, Topic “Dependence receptors participate in CNS injury progression” (5<sup>th</sup> Dependence Receptor Meeting, Les Menuires, France).
- 2012 Consultant for writing staff on T.V. show “Falling Skies”.
- 2011 Ross University School of Medicine Research Day Symposium, Keynote Speaker, Topic “Novel advances in neuroprotective strategies to treat CNS injury: From benchtop to bedside” (Commonwealth of Dominica).
- 2010 Fourth dependence receptor meeting (Invited Speaker). Topic “Eph receptors function as dependence receptors following traumatic CNS injury”. Foundation des Treilles (Nice, France).
- 2009 7th International symposium on experimental spinal cord repair and regeneration. (Invited Speaker) Topic: “Eph receptors function as novel pro-apoptotic receptors following CNS injury”. Brescia, Italy
- 2006 Second International Dependence Receptor Symposium (Invited Speaker) Topic: “Dependence receptors and neurogenesis: Ephrin receptors enter the club”. Buck Institute, California, USA
- 2005 Route 28 Summit in Neurobiology (Invited Speaker) Topic: “Restoring Mobility: Stem cells and Sensory/Motor Systems of the Spinal Cord”. Washington, USA
- 2004 Department of Medical Genetics (Invited Speaker)
- 2004 Department of Neurosurgery (Invited Speaker) University of Miami
- 2002 Department of Cell Biology and Anatomy (Invited Speaker) University of Miami
- 2000 Department of Physiology and Cell Biology (Invited Speaker) Ohio State University
- 2000 Kentucky Spinal Cord and Head Injury Research Symposium (Invited Speaker) Lexington, Kentucky
- 2000 Department of Neurosurgery, Grand Rounds (Invited Speaker) University of Miami
- 1999 Department of Neurosurgery (Invited Speaker) University of Texas Medical Center, Houston
- 1998 TIRR Foundation Research Symposium, (Invited Speaker) Houston, Texas
- 1997 Department of Neurobiology Seminar, (Invited Speaker) University of Texas Southwestern Medical Center
- 1996 Department of Immunology/Microbiology Seminar, (Invited Speaker) Northeastern Ohio University College of Medicine

Reviewer for Scientific Journals and Granting Agencies.

Scientific Journals

- i. Brain Research
- ii. Journal of Neuroscience
- iii. Journal of Neuroscience Research
- iv. Journal of Neurotrauma
- v. Journal of Neurochemistry
- vi. European Journal of Neuroscience
- vii. Experimental Neurology
- viii. Synapse
- ix. Stem Cells

Granting Agencies

- i. National Institute for Health: Special Emphasis Panel (Ad hoc) – 2012 to present
- ii. National Institute for Health: Neurosciences and Mental Health Board (Ad hoc) – 2010 to present
- iii. National Institute for Health: Neurogenesis and Cell Fate Study Section (Ad hoc) – 2006 to present
- iv. National Science Foundation (Ad hoc) - 2008
- v. New Jersey Commission on Spinal Cord Research (Chair & Member) 2004 to present
- vi. Craig H. Neilsen Foundation (Ad hoc) – 2008 to present
- vii. Institute for Women's Health, University of Miami (Ad hoc)
- viii. New Jersey Commission on Brain Injury Research (Member)
- ix. Medical Research Council (MRC) England (Ad hoc) – 2010 to present

**VI. TEACHING**

28. Teaching Awards Received: N/A

29. Teaching Specialization:

2014, 2018	Epidemiology and public health (EPH740) course
2012- <b>current</b>	Graduate Neuroanatomy (NEU797) course. Course coordinator and sole instructor.
2011	Course Coordinator for CNS Injury & Repair (NEU650) Course.
2009	Course Coordinator for Neuroscience I (NEU661) course.
2008-2009	Course Coordinator for Seminar in Neuroscience (NEU600) course.
2008	BIOLOGY/PSYCHOLOGY 403 Course, University of Miami, Undergraduate School Course
2007	Neuroscience II (Neu662) Module, University of Miami, Graduate Course
2007	Neuroscience and Behavioral Science Module, University of Miami, Medical School Course
2007	BIOLOGY/PSYCHOLOGY 403 Course, University of Miami, Undergraduate School Course
2006	Neuroscience II (Neu662) Module, University of Miami, Graduate Course
2006	BIOLOGY/PSYCHOLOGY 403 Course, University of Miami, Undergraduate School Course

Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

2006	Neuroscience and Behavioral Science Module, University of Miami, Medical School Course
2005	BIOLOGY/PSYCHOLOGY 403 Course, University of Miami, Undergraduate School Course
2005	Neuroscience and Behavioral Science Module, University of Miami, Medical School Course
2002 - 2003	Summer Scholars Program for High School Students
2002	Developmental Neurobiology (NEU663) , University of Miami, Neuroscience Program
1991 - 1994	Neuroanatomy, NEOUCOM, Medical School
1992 - 1993	Microbiology-Immunology, NEOUCOM, Medical School

30. Thesis and Dissertation Advising/Pre-Doctoral Student Supervision

2020 – <b>current</b>	Dena Arizanovska	Neuroscience	University of Miami
2020 – <b>current</b>	Maureen Ascona	Neuroscience	University of Miami
2017 – 2021	Stephen Tapanes	Neuroscience	University of Miami
2017 – 2019	Michael Watson	Neuroscience	University of Miami
2012 – 2016	Enmanuel Perez Martinez	Neuroscience	University of Miami (Clin. Fellow-Barnes-Jewish/Washington University)
2007-2009, 2012-2016	Poincyane Assis-Nascimento	Neuroscience	University of Miami (Assist. Prof. at Barry University)
2006 – 2007	Daniel Golden	Medical Student	University of Miami
2002 - 2008	Alma Rodenas-Ruano	Neuroscience	University of Miami (Post-doctoral-Albert Einstein College of Medicine- Laboratory of Dr. Suzanne Zukin; Assist. Prof.-Fordham University)
2001 - 2006	Shannon Mendez	Neuroscience	University of Miami (Post-doctoral fellowship at Harvard University- Laboratory of Dr. Ole Isacson; Director of Medical Affairs at Supernus Pharmaceuticals)

Graduate Committees Served

2019 – <b>current</b>	John Paul Turner	Mol./Cell. Pharm.	University of Miami
2018 – <b>current</b>	Nick O’Neill (Chair)	Neuroscience	University of Miami
2018 – 2020	Melanie Plastini	Neuroscience	University of Miami
2018 – 2020	Jeffery Lowell	Neuroscience	University of Miami
2015 – 2018	Nadine Kerr	Neuroscience	University of Miami
2013 - 2016	Han Gao	Neuroscience	University of Miami
2007 - 2009	Bradon Kitay	Neuroscience	University of Miami
2007 - 2012	Paul Morton	Neuroscience	University of Miami
2005 – 2009	William Buchser (Chair)	Neuroscience	University of Miami
2004 - 2008	Luminita Luca	Neuroscience	University of Miami
2003 - 2010	Ryan Williams	Neuroscience	University of Miami
2002 - 2009	Claudiu Nelersa	Biochemistry & Molecular Biology	University of Miami
2002 - 2005	Andrew Rosendahl	Neuroscience	University of Miami
2002 - 2005	Minh Tran	Neuroscience	University of Miami
2001 - 2004	Laurie Stepanek	Neuroscience	University of Miami

Graduate Student Laboratory Rotation Training

2018	Jessica Dennison	PIBS	University of Miami
2018	Michaela Edmond	PIBS	University of Miami
2017	Michael Watson	PIBS	University of Miami
2016	Stephen Tapanes	PIBS	University of Miami
2011	Enmanuel Perez Martinez	MD/PhD Program	University of Miami
2011	Sharon Lines	PIBS	University of Miami
2010	Michael Bellio	PIBS	University of Miami
2010	Yunjiao Zhu	PIBS	University of Miami
2009	Benjamin Gerovac	PIBS	University of Miami
2008	Ephraim Trakhtenberg	Neuroscience	University of Miami
2008	Stephanie Bacik	MD/PhD Program	University of Miami
2007	Stephanie Glass	Neuroscience	University of Miami
2006	Gisela Bauman	MD Student	Technical University (Munich)
2006	Poincyane Assis-Nascimento	Neuroscience	University of Miami
2006	Jonathan Kelley	Neuroscience	University of Miami
2006	Lana Jones	Neuroscience	University of Miami
2006	Joshua Johnstone	Neuroscience	University of Miami
2006	Jonathan Hertz	Neuroscience	University of Miami
2005	Brandon Kitay	MD/PhD Program	University of Miami
2002	Laura Arias	Neuroscience	University of Miami
2001	Minh Tran	Neuroscience	University of Miami

Qualification Examination Committee as a non-dissertation committee member

2013	An Wu	Neuroscience	University of Miami
2013	Alex Cohen	Neuroscience	University of Miami
2013	Steven Grieco	Neuroscience	University of Miami
2013	Alex Abrams	Neuroscience	University of Miami
2013	Christina Matheswan	Neuroscience	University of Miami
2013	Alex Cohen	Neuroscience	University of Miami
2012	Tania Del Rivero	Neuroscience	University of Miami
2012	Shervin Liddle	Neuroscience	University of Miami
2012	Allene Strickland	Neuroscience	University of Miami
2012	Benjamin Yunger	Neuroscience	University of Miami
2012	Yunjiao Zhu	Neuroscience	University of Miami
2012	Samuel Beckerman	Neuroscience	University of Miami
2012	Veronica Peschansky	Neuroscience	University of Miami
2011	Adamczak Apará	Neuroscience	University of Miami
2011	Stephanie Bacik	Neuroscience	University of Miami
2011	Charles Cohen	Neuroscience	University of Miami
2011	Gustavo Munguba	Neuroscience	University of Miami
2011	Amit Patel	Neuroscience	University of Miami



Curriculum Vitae  
**LIEBL, Ph.D., Daniel J.**

2011	Nima Sharifai	Neuroscience	University of Miami
2011	Praseeda Venugopalan	Neuroscience	University of Miami
2011	Ji Zha	Neuroscience	University of Miami
2010	Ephraim Trakenberg	Neuroscience	University of Miami
2010	Kahlilia Blanco	Neuroscience	University of Miami
2007	Jonathan Hertz	Neuroscience	University of Miami
2007	Gillian Reiersen	Neuroscience	University of Miami
2006	Mara Balda	Neuroscience	University of Miami
2004	Luca Luminita	Neuroscience	University of Miami

Postdoctoral Fellows/Clinical Fellows Trained

2019 – present	Madelen Diaz		University of Miami
2013 – 2018	Yanina Tsenkina		University of Miami
2011 – 2014	Kristy Dixon		University of Miami
2009 – 2016	Claudiu Nelersa		University of Miami
2006 – 2011	Michelle Hedrick Theus		University of Miami
2006 - 2011	Zhiye Zhuang		University of Miami
2006 - 2009	Erik Runko		University of Miami
2008 – 2009	Bing Yang		University of Miami
2007 – 2009	Kara Del Valle		University of Miami
2005 - 2006	Avner Ittah		University of Miami
2002 - 2005	Carla Blits-Huizinga		University of Miami
2001 - 2013	Jerome Ricard		University of Miami

Trained Volunteers (Medical Students, Undergraduates and High School Students)

2021	Andrea Zheng		Undergraduate
2019	Jason Leeds		Undergraduate
2018	Mahitha Kuanamneni		Undergraduate
2015	Bianca Marquez		Undergraduate
2015	Jessica Landau		Undergraduate
2013	Jesslyn Magee		Undergraduate
2012	Sopkio Jimsheleishvili		Undergraduate
2011	Christopher Banerjee		Medical Student
2011	Komal Kirti Patel		Undergraduate
2006	Seema Shah		Master's student
2006	Mark Barton		Undergraduate
2005	Klarnia Portnoy		Undergraduate
2005	Melissa Bengoa		High School Student
2005	Emilay Florez		High School Student
2004-2005	Sherlley Sanon		High School Student
2004-2005	Maggie Crosland		High School Student
2003-2004	Damilola S. Akinnifesi		Undergraduate
2002-2005	Jannis Brea		High School Student
2002-2003	Arya Attari		Undergraduate
2001-2002	Yasmina Abajas		Undergraduate
2001-2002	Cornelia Wallace		Undergraduate

2001-2002	Dimos Merinopolus	Undergraduate
2001-2002	Lisa Escandia	Undergraduate
2001-2002	Nidia Arita	High School Student
2001-2002	Kathryn Post	High School Student
2001-2002	Ashwin Mehta	Undergraduate
2000-2001	Kristy Giles	Undergraduate

**VII. SERVICE**

31. University Committee and Administrative Responsibilities:

2018 – Present	Miami Project faculty compensation committee
2017 – 2020	Committee for Mary Bartlett Bunge Women in Science lecture series
2014	Served on Cancer Biology Graduate Program Internal Review Committee
2013 – 2015	Graduate School Task Force – vice Chair (Dean appointed to review graduate education at UM)
2010 - Present	Interview for PIBS admissions
2010	Faculty Search Committee (Department of Neurosurgery)
2010 – 2016	Lois Pope Life Fellowship Committee
2009 - 2010	Director for Neuroscience I (NEU661) course
2008 – Present	Interview for MD/PhD admissions
2008 – 2013	Director of the Neuroscience Graduate Program
2008 – Present	Senior Advisory Committee for The Miami Project to Cure Paralysis
2008 – 2009	Director of Neuroscience Journal Club
2006 – 2013	Neuroscience Steering Committee (University of Miami)
2005	Chaired Neuroscience Day (University of Miami)
2005	Scientific Misconduct Committee (University of Miami)
2004 - 2008	Faculty Research Advisory Council (University of Miami)
2002 – 2008	IBC approval committee (University of Miami)
2002 – 2009	Animal Housing Committee (The Miami Project)
2002 - 2008	Animal Housing Committee-Chairman (The Miami Project)
2002 - 2004	Junior Faculty Steering Committee (University of Miami)
2000 - 2008	Neuroscience Admissions Committee (University of Miami)

University Appointments:

2020 – <b>current</b>	Associate Director of the MD/PhD program
2008 – 2013	Director of the Neuroscience Graduate Program
2000 - <b>current</b>	Neuroscience Graduate Program faculty (University of Miami)