

Robert M. Lober, M.D., Ph.D.

Pediatric Neurosurgeon
Director of the Living Biobank at Dayton Children's Hospital
One Children's Plaza
Dayton, OH 45404-1815
livingbiobank.org
@lober_lab on instagram

Assistant Professor
Department of Pediatrics, Boonshoft School of Medicine
Department of Neuroscience, Cell Biology and Physiology
Wright State University
Neuroscience Engineering Collaboration Building
Room 315, 3640 Colonel Glenn Highway
Dayton, OH 45435-0001
robert.lober@wright.edu

PHYSICIAN BIO

<https://www.childrensdayton.org/doctors/rob-lober>

PROVIDER INFORMATION

Physician and Surgeon
Medical Board of California
Issued 8/19/2009, expiration 8/31/2021

Doctor of Medicine
State Medical Board of Ohio
Issued 4/9/2015, expiration 7/1/2020

Board Eligible
American Board of Neurological Surgery

Basic Life Support for Healthcare Providers Certification
Kettering Health Network, Kettering, OH 43429

Pediatric Advanced Life Support Provider Certification
Kettering Health Network, Kettering, OH 43429

Advanced Trauma Life Support Provider Certification
Kettering Health Network, Kettering, OH 43429

EDUCATION AND TRAINING

- 1995-1996 Diplomate in Modern Standard Arabic
Defense Language Institute, Presidio of Monterey, California
- 1998-2001 Bachelor of Science in Biology
Augusta University, Augusta, Georgia
- 2001-2008 Doctor of Medicine and Doctor of Philosophy in Biomedical Science
Medical College of Georgia School of Medicine
Augusta University, Augusta, Georgia
Department of Pharmacology and Toxicology
Graduate Advisor: Nevin Lambert, PhD
- 2008-2014 Resident in Neurosurgery
Stanford Hospitals and Clinics, Stanford, California
Department of Neurosurgery
Program Director: Griffith Harsh, IV, MD
- 2011-2012 Fellow in Pediatric Neuro-Oncology
Lucile Packard Children's Hospital, Palo Alto, California
Stanford School of Medicine, Department of Neurology
Division of Child Neurology
Fellowship Directors: Paul Fisher, MD, and Sonia Partap, MD
- 2014-2015 Fellow in Pediatric Neurosurgery
Lucile Packard Children's Hospital, Palo Alto, California
Stanford School of Medicine, Department of Neurosurgery
Division of Pediatric Neurosurgery
Fellowship Directors: Michael S.B. Edwards, MD, and Gerald Grant, MD

ACADEMIC APPOINTMENTS

- 2014-2015 Clinical Instructor of Neurosurgery
Stanford School of Medicine
Stanford, California
- 2015- Assistant Professor
Department of Pediatrics, Boonshoft School of Medicine
Department of Neuroscience, Cell Biology and Physiology
Wright State University
Dayton, Ohio

HOSPITAL COMMITTEE PARTICIPATION

Dayton Children's Hospital

- 2015- Chairman of Robert C. Cohn, MD Memorial Research Grant Committee
Institutional Review Board, Research Steering and Strategic Planning, and Protocol Feasibility Review Committees
Trauma Process Improvement Committee
- 2017- Surgical Process Improvement and Perioperative Executive Committees
- 2018- Cancer Liaison Physician for Dayton Children's Cancer Program and American College of Surgeons
Multidisciplinary Peer Review Committee

Premier Health

- 2015-2017 Neuroscience Institute Physician Council

INVITED EDITORIAL DUTIES AND BOARDS

- 2015 Referee/Reviewer: Cureus, Journal of Pediatric Neuroradiology, PLoS one
- 2016 Referee/Reviewer: Journal of Pediatrics, American Journal of Neuroradiology
- 2017 Axiom Clinical Research, Dayton, Ohio
Member, Scientific Advisory Board
- 2018- Children's Brain Tumor Tissue Consortium, Philadelphia, PA
Member, Scientific Advisory Board
- 2019- Children's Brain Tumor Foundation, New York, NY
Member, Board of Directors

SELECTED HONORS

1997	721 st Military Intelligence Battalion Soldier of the Year
1998	Joint Service Achievement Medals, United States Army
2000	Beta Beta Beta Biological Honor Society
2004	American Society for Cell Biology Predoctoral Travel Award
2006	Biophysical Society Predoctoral Travel Award
2006	Ph.D. with Distinction, MCG School of Graduate Studies
2007	Clinical Scholar Award, MCG Department of Neurology
2007	Alpha Omega Alpha Honor Medical Society, Alpha Chapter of GA
2008	Merck Manual Award for Perfect G.P.A. in Medical School
2012	Rosegay Award, San Francisco Neurological Society
2012	Starfish Award, LPCH Oncology Palliative Care Committee
2016	Martha Franz Award for Specialty Pediatrics, Dayton Children's Hospital
2018	Wright State University Academy of Medicine Junior Faculty Award

PEER-REVIEWED RESEARCH FUNDING

2005	American Heart Association Southeast Predoctoral Fellowship 0515176B Convergence of GPCR signals onto GIRK channels Sponsor: Nevin A. Lambert, Ph.D. (\$38,000)
2005	National Research Service Award 1 F30 NS 052070-01A GPCR lateral membrane diffusion in neuronal signaling Sponsor: Nevin A. Lambert, Ph.D. (\$73,000)
2018	Mayfield Education and Research Foundation Spark Grant Role of repressed tumor suppressor genes in DIPG treatment resistance Role: Principal Investigator (\$48,500) Co-investigator: Thomas L. Brown, PhD

PRIVATE RESEARCH DONATIONS

2016	Gala of Hope Private Grant Creation of Dayton Children's Tissue Bank (\$198,870)
2017	John French Estate Gift Astrocytoma Research at Dayton Children's (\$2,600)
	Hartzell Norris Charitable Trust Equipment Support for Glioma Research at Dayton Children's (\$10,000)
	Neils A. and Ruth Lundgard Foundation Supplies for Tumor Research at Dayton Children's (\$10,000)

MENTORED STUDENT FUNDING

- 2017 Boonshoft School of Medicine Medical Student Research Grant
Hypoxic regulation of glycolysis in diffuse intrinsic pontine glioma
Trainee: Maryam Shahin, BS (\$2,500)
- Boonshoft School of Medicine Medical Student Research Grant
Incidental brain tumors in pediatric patients following trauma
Trainee: Isaiah Cochran, BS (\$1,500)
- 2018 Wright State University Honors Program Research Scholarship
Regulation of hypoxia-inducible factors by microRNAs in glioblastoma
Trainee: Blake Herstine (\$400)
- Ohio Space Grant Consortium Undergraduate STEM Scholarship
Epigenetic control of stem cell markers in diffuse intrinsic pontine glioma
Trainee: Madison Jewell (\$3,500)

MENTORED STUDENT PRESENTATIONS

- 2018 Jasty, U., Waker, C.A., Mirkin, D.L., Kamian, K., **Lober, R.M.** Diffuse osteoma of the skull resembling fibrous dysplasia. 10th Annual Boonshoft School of Medicine Student Research Symposium. Dayton, OH. April 11, 2018.
- Herstine, B., **Lober, R.M.** Differential expression of hypoxia-inducible isoforms in glioblastoma. Wright State University Department of Biological Sciences Honors Program. Dayton, OH. April 23, 2018.
- 2019 Trittschuh, K., **Lober, R.M.** Cancer stem cell expression in diffuse intrinsic pontine glioma. Wright State University Department of Biological Sciences Honors Program. April, 2019.
- Vinson, C.J., Waker, C.A., Keoni, C., **Lober, R.M.** The Effects of dexamethasone on diffuse intrinsic pontine glioma sensitivity to panobinostat, a potential chemotherapeutic treatment. Wright State University College of Science and Mathematics Festival of Research, Dayton, OH. September 20, 2019.
- Waker, C.A., Brown, T.L., **Lober, R.M.** Transketolase-like 1 as a potential therapeutic target for diffuse midline glioma. Wright State University College of Science and Mathematics Festival of Research, Dayton, OH. September 20, 2019.

FORMAL COURSES TAUGHT AT WRIGHT STATE UNIVERSITY

- 2017 BIO 4990 - Special Problems in Biology (1 credit-hour)
 BMS 9950 - Non-dissertation Research (4 credit-hours)
 BMS 9960 – Laboratory Rotation 1 (1 credit-hour)
 BIO 4950 – Senior Honors Research (2 credit-hours)
- 2018 BIO 4950 – Senior Honors Research (11 credit-hours)
 BMS 9950 – Non-dissertation Research (14 credit-hours)
 NEU 4990 - Individual Neuroscience Research (12 credit-hours)
 BMS 9970 – Laboratory Rotation 2 (5 credit-hours)
- 2019 BMS 9990 – Dissertation Research (5 credit-hours)
 BIO 4950 – Senior Honors Research (2 credit-hours)

GRADUATE STUDENT ADVISORY COMMITTEES

- 2016- PhD Dissertation Advisor
 Christopher Waker, MS
 Transketolase-like 1 as a potential therapeutic target for diffuse midline glioma.
- 2019- PhD Committee Member
 Ryan Rakoczy, MS
 Acute oxygen-sensing by the carotid body: the thermal microdomain model

PEER-REVIEWED REPORTS

1. Dodd, M.E., Ristich, V.L., Ray, S., **Lober, R.M.**, and Bollag, W.B. (2005) Regulation of protein kinase D during differentiation and proliferation of primary mouse keratinocytes, *J. Inv. Dermatol.* 125:294-306. PMID: 16098040
2. Digby, G.J., **Lober, R.M.**, Sethi, P.R., and Lambert, N.A. (2006) Some G protein heterotrimers physically dissociate in living cells. *Proc. Natl. Acad. Sci.* 103:17789-17794. PMID: 17095603
3. **Lober, R.M.**, Pereira, M.A., and Lambert, N.A. (2006) Rapid activation of heterotrimeric G proteins by immobilized G protein-coupled receptors, *J. Neurosci.* 26:12602-12608. PMID: 17135422
4. **Lober, R.M.**, Sharma, S., Bell, B., Free, A., Figuero, R., Sheils, C.W., Lee, M., and Cowell, J. (2010) Pediatric intramedullary spinal cord glioblastoma. *Rare Tumors.* 2(e48):135-141. PMID: 21139963

5. Webb, D.M., Schneider, J.R., **Lober, R.M.**, and Vender, J.R. (2011) Granulomatous conduit for intrathecal infusion of morphine and bupivacaine. *Reg Anesth Pain Med.* 36(2). PMID: 21270725
6. Kalanithi, P., **Lober, R.M.**, Lad, S., and Boakye, M. (2010) Traumatic epidural hematoma: trends in national mortality and cost from 1993-2006. *AANS Neurosurgeon.* 19(2):22-26
7. **Lober, R.M.**, Guzman, R.G., Cheshier, S.H, Frederick, D.R., Edwards, M.S.B., Yeom, K.W., (2012) Application of diffusion tensor tractography in pediatric optic pathway glioma. *J Neurosurgery Pediatr.* 10(4):273-280. PMID: 22900485.
8. Hayden Gephart M.G., **Lober, R.M.**, Arrigo, R.T., Zygourakis, C.C., Guzman, R., Boakye, M., Edwards, M.S.B., Fisher, P.G. (2012) Trends in the diagnosis and treatment of pediatric primary spinal cord tumors. *J Neurosurgery Pediatr.* 10(6):555-559. PMID: 23061821
9. Yeom, K.W., **Lober, R.M.**, Mobley, B.C., Harsh, G.R., Edwards, M.S.B., Vogel, H., Allagio, R., Pearson, M., Fischbein, N.J. (2012) Diffusion-weighted MRI: distinction of skull base chordoma from chondrosarcoma. *AJNR Am J Neuroradiol.* 34(5):1056-1061. PMID: 23124635
10. Veeravagu A., Chen, Y.-R., Lieberson, R., **Lober, R.M.**, Chang, S.D. (2012) Intramedullary spinal cord metastasis: diagnosis and management. *Contemporary Neurosurgery.* 34(22):1-5
11. **Lober, R.M.**, Veeravagu, A., Singh, H. (2013) Brain tuberculoma in a non-endemic area. *Infectious Disease Reports.* 5(1) Jan 28. PMID: 24470952
12. Thomas, R.P., Xu, L.W., **Lober, R.M.**, Nagpal, S., Li, G. (2013) The incidence and significance of multiple lesions in glioblastoma. *J Neuro-Oncol.* 112(1):91-97. PMID 23354652
13. Yeom, K.W., Mobley, B.C., **Lober, R.M.**, Andre, J.B., Partap, S., Vogel, H., Barnes, P.D. (2013) Distinctive MRI features of pediatric medulloblastoma subtypes. *AJR Am J Roentgenol.* 200(4):895-903. PMID 23521467
14. Yeom, K.W., Holdsworth, S.J., Van, A.T., Skare, S., **Lober, R.M.**, Barnes, P.D., Bammer, R. (2013) Comparison of Readout-Segmented (RS)-EPI and Single-Shot EPI in clinical application of diffusion weighted imaging in pediatric brain. *AJR Am J Roentgenol.* 200(5):W437-443. PMID: 23617511
15. Singh, H., Grobelny, B.T., Harrop, J., Rosen, M., **Lober, R.M.**, Evans, J. (2013) Endonasal access to the upper cervical spine: Part One- Radiographic morphometric analysis. *J Neurological Surg Part B – Skull Base.* 74(3):176-184. PMID: 24436909
16. Yeom, K.W., **Lober, R.M.**, Andre, J.B., Fisher, P.G., Barnes, P.D., Edwards, M.S.B., Partap, S. (2013) Prognostic role for diffusion-weighted imaging of pediatric optic pathway glioma. *J Neuro-Oncol.* 113(3):479-483. PMID 23673514
17. Yeom, K.W., **Lober, R.M.**, Barnes, P.D., Campen, C. (2013) Cerebral arterial spin labeled perfusion in children with neurofibromatosis I. *AJNR Am J Neuroradiol.* 34(9):1823-1828. PMID: 23764727
18. Veeravagu, A., Joseph, R., Jiang, B., **Lober, R.M.**, Torres, R., Singh, H. (2013) Traumatic epistaxis: skull base defects, intracranial complications, and neurosurgical considerations. *Int J Surg Case Rep.* 4(8):656-661. PMID: 23792475

19. Yeom, K.W., Mitchell, L.A., **Lober, R.M.**, Barnes, P.D., Vogel, H., Fisher, P.G., Edwards, M.S.B. (2013) Arterial spin labeled perfusion of pediatric brain tumors. *AJNR Am J Neuroradiol.* 35(2):395-401. PMID: 23907239
20. Perreault, S., **Lober, R.M.**, Zhang, G.H., Hershon L., Decarie, J.-C., Yeom, K.W., Vogel, H., Carret, A.-S., Fisher, P.G., Partap, S. (2013) Relapse patterns in pediatric embryonal central nervous system tumors. *J Neurooncol.* 115(2):209-215. PMID: 23921420
21. Yeom, K.W., **Lober, R.M.**, Partap, S., Tsolinas, R., Telischak N., Barnes, P.D., Edwards, M.S.B. (2013) Increased focal hemosiderin deposition in pediatric medulloblastoma patients receiving radiotherapy at a later age. *J Neurosurg Pediatr.* 12(5):444-451. PMID: 23992236
22. Perreault, S., **Lober, R.M.**, Cheshier, S., Edwards, M.S.B., Partap, S., Yeom, K.W. (2013) Time-dependent structural changes of the dentate nuclei and dentatothalamic tract in children treated for posterior fossa tumor. *AJNR Am J Neuroradiol.* Sep 19 [Epub ahead of print]. PMID: 24052507
23. Perreault, S., **Lober, R.M.**, Carret, A.-S., Zhang, G., Hershon, L., Decarie, J.-C., Vogel, H., Yeom, K.W., Fisher, P.G. (2014) Surveillance imaging in children with malignant CNS tumors: low yield of spine MRI. *J Neurooncol* 116(3):617-623. PMID: 24401959
24. **Lober, R.M.**, Cho, Y.-J., Tang, Y., Barnes, PD, Edwards, M.S.B., Fisher, P.G., Monje, M., Yeom, K.W. (2014) Diffusion-weighted MRI derived apparent diffusion coefficient identifies prognostically distinct subgroups of pediatric diffuse intrinsic pontine glioma. *J Neurooncol.* 117(1):175-182. PMID: 24522717
25. Yeom, K.W., **Lober, R.M.**, Alexander, A., Cheshier, S.H., Edwards, M.S.B. (2014) Hydrocephalus decreases arterial spin-labeled perfusion. *Am J Neuroradiol AJNR.* 35(7):1433-1439. PMID: 24651817
26. Perreault S., **Lober, R.M.**, Davis C., Stave C., Partap S., Fisher, P.G. (2014) Sports and childhood brain tumors: Can I play? *Neurooncol Pract.* 1(4):158-165. PMID: 26034627
27. Choudhri O., **Lober, R.M.**, Camara-Quintana, J., Yeom, K.W., Guzman, R., Edwards, M.S.B. (2014). Carbon dioxide laser for corpus callosotomy in the pediatric population. *J Neurosurg Pediatr.* 15(3):321-327. PMID: 25525931
28. Yeom, K.W., **Lober, R.M.**, Nelson, M.D., Panigrahy, A., Blüml, S. (2015) Citrate concentrations increase with hypoperfusion in pediatric diffuse intrinsic pontine glioma. *J Neurooncol.* 122(2):383-389. PMID: 25670389
29. Singh, H., **Lober, R.M.**, Viridi, G.S., Lopez, H., Rosen, M., Evans, J. (2015) Endonasal access to the upper cervical spine: part two- cadaveric analysis. *J Neurological Surg Part B – Skull Base.* 76(4):262-265. PMID: 26225313
30. Khan, N., **Lober, R.M.**, Ostergran, L., Petralia, J., Bell-Stephens, T., Navarro, R., Feroze, A., Steinberg, G.K. (2017) Measuring cerebral blood flow in moyamoya angiopathy by quantitative MR angiography noninvasive optimal vessel analysis. *Neurosurgery.* Feb 14 [Epub ahead of print]. PMID: 28204602
31. Hsu C.H., **Lober, R.M.**, Li, M.D., Partap, S. Murphy, P.A., Barnes, P.D., Fisher, P.G., Yeom, K.W. (2015) Decreased apparent diffusion coefficient correlates with objective response of pediatric low-grade glioma to bevacizumab. *J Neurooncol.* 122(3):491-496. PMID: 25758812

32. Singh, H., Doan, A., **Lober, R.M.**, Vogel, R., Matsumoto, C., Kenning, T.J., Evans, J.J. (2016) Intraoperative neurophysiological monitoring for extended endonasal approaches to the skull base: a technical guide. *Scientifica (Cairo)* 2016:1751245. PMID: 27293965
33. Forkert, N.D., Li, M.D., **Lober, R.M.**, Yeom, K.W. (2016) Gray matter growth is accompanied by increasing blood flow and decreasing apparent diffusion coefficient during childhood. *Am J Neuroradiol. AJNR.* April 21 [Epub ahead of print]. PMID: 27102314
34. Li, M.D., Forkert, N.D., Kundu, P., Ambler, C., **Lober, R.M.**, Burns, T.C., Barnes, P.D., Gibbs, I.C., Grant, G.A., Fisher, P.G., Cheshier, S.H., Campen, C.J., Monje, M., Yeom, K.W. (2017) Brain perfusion and diffusion abnormalities in children treated for posterior fossa brain tumors. *J Pediatr.* Feb 7 [Epub ahead of print]. PMID: 28187964
35. Fujimura R., **Lober, R.M.**, Kamian, K., Kleiner, L. (2018) Maladjustment of programmable ventricular shunt valves by inadvertent exposure to a common hospital device. *Surg Neurol Int* 9:51. PMID: 29576902
36. Diller, E.E., Parker, J.G., Ey, E.H., **Lober, R.M.** (2019) Transient neurologic deficit without vascular pathology correlates with reversible focal hypoperfusion on arterial spin-labeled perfusion imaging. *J Pediatr Neurol.* 17(02):089-094.
37. Chen, R., Keoni, C., **Lober, R.M.**, Waker, C.A., Gutmann, D. (2019) KIAA1549-BRAF expression establishes a permissive tumor microenvironment through NFkB-mediated CCL2 production. *Neoplasia* 21(1):52-60. PMID: 30504064
38. Quon, J.L., Kim, L.H., **Lober, R.M.**, Achrol, A.S., Steinberg, G.K., Yeom, K.W. (2019) Arterial spin-labeled cerebral perfusion changes after revascularization surgery in pediatric moyamoya disease and syndrome. *J Neurosurg Pediatr.* Feb 8:1-7. PMID:30738390
39. Shpanskaya, K., Quon, J.L., **Lober, R.M.**, Cheshier, S.H., Edwards, M.S.B., Grant, G.A., Yeom, K.W. (2019) Optic nerve diffusion tensor imaging for evaluation of pediatric hydrocephalus. *Neurosurgical Focus.* Accepted 9/4/2019.

RESEARCH ABSTRACTS FOR SCIENTIFIC MEETINGS

1. **Lober, R.M.**, Pereira, M.A., and Lambert, N.A. (2004) Activation of inwardly rectifying potassium channels by immobilized G protein-coupled receptors. *Soc. Neurosci., San Diego, CA, Abs 961.21*
2. **Lober, R.M.**, Pereira, M.A., Digby, G.J., and Lambert, N.A. (2004) Activation of immobilized inwardly rectifying potassium channels by two populations of immobilized G protein-coupled receptors. *Am. Soc. Cell Biol., Washington, D.C., Abs B395*
3. **Lober, R.M.**, Pereira, M.A., and Lambert, N.A. (2005) The role of lateral mobility in rapid GPCR signaling in CNS neurons, *Mol. Pharmacol. Gordon Regional Conf., Il Ciocco, Barga, Italy*

4. Chen, J.-R., Huang, J.-P., **Lober, R.M.**, Yu, J.C., Chew, C.S., Huang, I.-Y., Huang, S.-T., and Borke, J.L. (2005) Ets and the maintenance of spatial homeostasis of cranial sutures. *FEBS J.*, 272 S. 1
5. **Lober, R.M.**, Digby, G.J., and Lambert, N.A. (2006) Immobilization of GPCRs at the plasma membrane constrains the diffusion of fluorescent G proteins. *Biophys. Soc.*, Salt Lake City, UT
6. Digby, G.J., **Lober, R.M.**, and Lambert, N.A. (2006) Interaction between GPCR signaling components studied with fluorescence recovery after photobleaching (FRAP). *Acta Physiologica Vol 186, Supplement 650 :SW1-2*
7. Digby, G.J., **Lober, R.M.**, Sethi, P.R., and Lambert, N.A. (2007) Some G protein heterotrimers physically dissociate in living cells. *Biophys. Soc.*, Baltimore, MD
8. Lieberson, R., Adler, J., Harsh, G., Lee, M., Choi, C., Soltys, S., Gibbs, I., **Lober R.M.**, Chang S. (2009) Long-term results of radiosurgery in the treatment of paragangliomas. 9th Biennial Congress and Exhibition of the International Stereotactic Radiosurgery Society. Seoul, South Korea
9. Webb, D.M., Schneider, J.R., **Lober, R.M.**, Vender, J. (2010) Granulomatous conduit for intrathecal infusion of morphine and bupivacaine. *Am. Soc. Reg. Anesth. Pain Med.* Toronto, Canada
10. Khan, N., **Lober, R.M.**, Petralia, J., Choudhri, O., Steinberg, G.K. (2010) Magnetic resonance angiography for evaluation of moyamoya disease. *Cong. Neurol Surg.* San Francisco, CA
11. Choudhri, O., Bell-Stephens T.E., **Lober, R.M.**, Dorfman, L.J., Fischbein, N., Steinberg, G.K. (2010) Misdiagnosis of moyamoya disease as multiple sclerosis variants in a case series of seven patients. *Cong. Neurol. Surg.* San Francisco, CA
12. Khan, N., Marks, M.P., Petralia, J., **Lober, R.M.**, Tunovic, E., Steinberg, G.K. (2010) Acute spontaneous occlusion of contralateral intracranial ICA and/or MCA after STA-MCA bypass in moyamoya resulting in major stroke. *Am. Assoc. Neurol. Surg.* Denver, CO
13. Yeom, K., Andre, J.B., **Lober, R.M.**, Rosenberg, J., Fisher, P.G., Edwards, M.S.B., Barnes, P.D., Partap, S. (2011) Prognostic role of diffusion-weighted MRI in pediatric optic glioma. *Society for Neuro-Oncology/CNS Tumor Section.* Anaheim, CA
14. **Lober, R.M.**, Guzman, R., Edwards, M.S.B., Yeom, K.W. (2011) Application of diffusion tensor tractography for pediatric optic glioma. Podium presentation, AANS Pediatric Section meeting. Austin, TX
15. **Lober, R.M.**, Yeom, K.W., Fischbein N., Edwards, M.S.B., Harsh, G.R., Vogel, H., Mobley, B. (2012) Role of diffusion-weighted MRI in clival chordoma. *North American Skull Base Society,* Las Vegas, NV
16. Singh H., **Lober R.M.**, Lopez, H., Rosen M., Evans J. (2012) Endonasal access to the upper cervical spine: cadaveric analysis. *North American Skull Base Society,* Las Vegas, NV. *J Neurol Surg B* 73:A193
17. Alexander, A., Yeom, K.W., **Lober, R.M.**, Shankaranarayanan, A., Edwards, M.S.B. (2012) Arterial spin labeling cerebral blood flow as a correlate of clinically significant hydrocephalus in children with brain tumors. *American Association of Neurological Surgeons,* Miami, FL

18. Jung, H., **Lober, R.M.**, Soltys S.G., Gibbs, I., Harsh, G.R. (2012) Pain following radiotherapy for skull base tumors despite tumor control. American Association of Neurological Surgeons, Miami, FL
19. **Lober, R.M.**, Yeom, K.W., Alexander, A., Barnes, P., Edwards, M.S.B. (2012) Arterial spin labeling cerebral blood flow as a correlate of clinically significant hydrocephalus in children with brain tumors. Podium presentation, Society for Pediatric Radiology, San Francisco, CA
20. **Lober, R.M.**, Yeom, K.W., Barnes, P.D., Edwards, M.S.B. (2012) Prognostic role of diffusion-weighted MRI in pediatric optic pathway glioma. Podium presentation, Society for Pediatric Radiology, San Francisco, CA
21. **Lober, R.M.**, Edwards, M.S.B., Barnes, P.D., Yeom, K.W. (2012) Application of diffusion tensor tractography in pediatric optic pathway glioma. Podium presentation, Society for Pediatric Radiology, San Francisco, CA
22. **Lober, R.M.**, Campen, C., Barnes, P.D., Yeom, K.W. (2012) Diminished ASL intracranial perfusion in children with neurofibromatosis type I. Podium presentation, Society for Pediatric Radiology, San Francisco, CA
23. **Lober, R.M.**, Fisher, P.G., Edwards, M.S.B., Yeom, K.W., Monje, M. (2012) Clues to pontine gliomagenesis from childhood pontine gliogenesis. International Society for Pediatric Neuro-Oncology, Toronto, Canada
24. Perreault, S., **Lober, R.M.**, Yeom, K., Carret, A.-S., Partap, S., Fisher, P.G. (2012) Surveillance spine MRI offers a low yield of relapse detection in patients with medulloblastoma. International Society for Pediatric Neuro-Oncology, Toronto, Canada
25. **Lober, R.M.**, Perreault, S., Partap, S., Edwards, M.S.B., Fisher, P.G., Yeom, K.W. (2012) Injury to dentate nuclei and efferent fibers by pediatric posterior fossa tumors. International Society for Pediatric Neuro-Oncology, Toronto, Canada
26. Xu, L.W., Thomas, R., **Lober, R.M.**, Nagpal, S., Li, G. (2012) The incidence and significance of multiple lesions in glioblastoma. Society for Neuro-Oncology, Washington, D.C.
27. Perreault, S., **Lober, R.M.**, Zhang, G., Hershon, L., Decarie, J.-C., St. Jacques, M., Yeom, K.W., Vogel, H., Partap, S., Carret A.-S., Fisher, P.G. (2012) Different relapse patterns in embryonal CNS tumors. Society for Neuro-Oncology, Washington, D.C.
28. Perreault, S., **Lober, R.M.**, Partap, S., Carret, A.-S., Fisher, P.G. (2012) Should we expect symptoms at relapse? Society for Neuro-Oncology, Washington, D.C.
29. Yeom, K.W., **Lober, R.M.**, Partap, S., Tsolinas, R., Telischak N., Barnes, P.D., Edwards, M.S.B. (2013) Increased focal hemosiderin deposition in pediatric medulloblastoma patients receiving radiotherapy at a later age. Congress of Neurological Surgeons, San Francisco, CA, October 19-23, 2013
30. Achrol, A.S., Yeom, K.W., **Lober, R.M.**, Loya, J.J., Westbroek, E.M., Steinberg, G.K. (2013) Arterial spin-labeling MRI detects cerebral blood flow changes in pediatric moyamoya disease. Congress of Neurological Surgeons, San Francisco, CA, October 19-23, 2013
31. Achrol, A.S., Mitchell, L.A., Loya J.J., Westbroek, E.M., Feroze, A., Rodriguez, S., Gevaert, O., Yeom, K.W., Sahoo, D., Ajlan, A.M., Gholamin, S., Mitra, S.S., **Lober, R.M.**, Chang, S.D., Harsh, G.R., Li, G., Steinberg, G.K., Cheshier, S.H. (2013) Glioblastoma multiforme involving the subventricular zone is associated with

- aggressive radiographic features and poor outcomes. Congress of Neurological Surgeons, San Francisco, CA, October 19-23, 2013
32. Achrol, A.S., Mitchell, L.A., Westbroek, E.M., Loya J.J., Feroze, A., Rodriguez, S., Gevaert, O., Yeom, K.W., Sahoo, D., Ajlan, A.M., Gholamin, S., **Lober, R.M.**, Chang, S.D., Harsh, G.R., Li, G., Steinberg, G.K., Cheshier, S.H. (2013) Sex and race differences in presentation and radiographic features of glioblastoma. Congress of Neurological Surgeons, San Francisco, CA, October 19-23, 2013
 33. **Lober, R.M.**, Lu, L., Hayden Gephart, M.G., Fisher, P.G. (2013) Association between symptom duration and survival in children with brain tumors. 4th Quadrennial Meeting of the World Federation of Neuro-Oncology in conjunction with the 2013 Scientific Meeting and Education Day of the Society for Neuro-Oncology, San Francisco, CA, November, 2013
 34. **Lober, R.M.**, Yeom, K.W., Holdsworth, S.J., Edwards, M.S.B. (2013) Diffusion tensor tractography for presurgical evaluation of white matter displacement by brainstem lesions in children. Podium presentation, AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting, Toronto, Canada, December 3-6, 2013
 35. Navarro, R., Feroze, A., Choudhri, O., **Lober, R.**, Khan, N., Steinberg, G. (2014) E-014 changes in posterior circulation arterial flows after revascularization surgery in moyamoya disease: a quantitative MRI study. *J Neurointerv Surg.* 6 Suppl 1:A44. PMID: 25064929
 36. Kamian, K., **Lober, R.M.**, Kleiner, L., Mancho, S. (2017) A new trick for an old dog: a technical advance for minimally invasive sagittal craniectomy. American Association of Neurological Surgeons. Los Angeles, CA, April, 2017.
 37. Waker, C.A., Shahin, M., Kamian, A., Lober, Z.C., **Lober, R.M.** (2017) Differential hypoxic response in human DIPG cell lines. Society for Neuro-Oncology. New York, NY. June 15-16, 2017.
 38. Diller, E.E., Parker, J.G., **Lober, R.M.**, Sherwood, M.S. (2017) Integrating cellular and magnetic relaxation properties for multimodal nosologic imaging of gliomas. Radiological Society of North America Annual Meeting. Chicago, IL. November 26 to December 1, 2017.
 39. Parker, J.G., Diller, E.E., **Lober, R.M.** (2018) Quantifying individual and collective prediction accuracy of MR contrasts for glioma tissue compartment classification. International Society for Magnetic Resonance in Medicine / European Society for Magnetic Resonance in Medicine and Biology. Paris, France. June 19, 2018.
 40. Waker, C.A., Keoni, C., Schurko, B., Brown, T.L., **Lober, R.M.** (2018) Hypoxia-inducible factors regulate diffuse intrinsic pontine glioma growth in normoxic culture. International Society for Pediatric Neuro-Oncology. Denver, CO. July 1, 2018.
 41. Parker, J.G., Diller, E.E., **Lober, R.M.** (2018) Voxel-wise prediction of micro-scale tumor pathology from multicontrast MR, non-parametric machine learning, and spatially registered core biopsy. International Society for Magnetic Resonance in Medicine Workshop on Advances in Multiscale Cancer Detection. Dublin, Ireland. October 7-10, 2018.
 42. Waker, C.A., Dole, M., Wright, J., El-Sheikh, A., Vachhrajani, S., Kamian, K., **Lober, R.M.** (2018) Pediatric meningioma: a National Cancer Database Analysis. AANS/CNS Section on Pediatric Neurological Surgery 47th Annual Meeting, Nashville TN. December 6-9, 2018.

43. Cavalier, A., Kamian, K., **Lober, R.M.**, Vachhrajani, S. (2019) Spinal subdural hematoma in non-accidental trauma: common but unexplained. American Association of Neurological Surgeons Annual Meeting, San Diego, CA. April 13-17, 2019.
44. Quon, J.L, Edwards, M.S.B., Grant, G.A., Cheshier, S.C., **Lober, R.M.**, Yeom, K.W. (2019) Automatic detection and classification of pediatric posterior fossa tumors on magnetic resonance imaging using deep learning. AANS/CNS Section on Pediatric Neurological Surgery 48th Annual Meeting, Scottsdale, AZ. December 5-8, 2019.

SELECTED MONOGRAPHS AND BOOK CHAPTERS

1. **Lober, R.M.**, Fisher, P.G. (2012) 50 years ago in the Journal of Pediatrics: the surgical management of meningoceles and meningomyeloceles. *J Pediatr.* 161(4):734. PMID: 22999580
2. **Lober, R.M.**, Harsh, G.R. (2012) A perspective on recurrent craniopharyngioma. *World Neurosurgery.* 79(5-6):645-646. PMID: 23111221
3. **Lober, R.M.** (2013) Low grade gliomas of childhood: the actual management. *Minerva Pediatr.* 65(2):149-165. PMID: 23612260
4. **Lober, R.M.**, Hayden, M.G. (2013) Neurosurgical dictation templates. In *Tarascon Neurosurgery Pocketbook.* Hayden, MG (Ed.) Tarascon Press
5. **Lober, R.M.**, Fisher, P.G. (2013) Low grade astrocytoma. In *Clinical Decision Support: Pediatrics.* Decision Support in Medicine, LLC, Wilmington, DE. www.decisionsupportinmedicine.com
6. Craig, A., **Lober, R.M.**, Grant, G.A. (2015) Complex fetal care: implications of fetal ventriculomegaly: a neurosurgical perspective. *NeoReviews* 16(4):e254-259.
7. **Lober, R.M.**, Partap, S. (2016) Hydrocephalus. In *American Academy of Pediatrics Textbook of Pediatric Care.* McInerney T.K., Adam H.M., Campbell D.E., Kamat D.M., Kelleher E.J. (Eds). Elk Grove, IL: American Academy of Pediatrics.
8. Waker, C.A., **Lober, R.M.** (2019) Brain tumors of glial origin. In *Myelin- Basic and Clinical Advances.* Ogata, T., Suzuki, K. (Eds). Springer Nature. *In press.*

SELECTED INVITED SPEAKING EVENTS

1. Prognostic role for diffusion-weighted imaging of diffuse intrinsic pontine glioma. Annual Meeting of the San Francisco Neurological Society. Sonoma, CA. 5/20/2012
2. Diffusion imaging of pediatric brain tumors. Stanford Neurosurgery Grand Rounds. Stanford, CA. 6/29/2012
3. Diffusion imaging in treatment planning for optic pathway gliomas. Annual Meeting of the California Association of Neurological Surgeons. Long Beach, CA. 1/20/2013
4. Increased focal hemosiderin deposition in pediatric medulloblastoma patients receiving radiotherapy at a later age. Stanford Neuroscience Forum. Stanford, CA. 6/7/2013

5. Changes in the dentatorubrothalamic pathway after treatment of posterior fossa tumors. 39th Annual Meeting of the Hanbery Neurosurgical Society. Carmel, CA. 8/3/2013
6. Lessons learned on a random walk to brain surgery and diffusion imaging. 4th Annual Georgia Regents University MD/PhD Retreat. Savannah, GA. 6/27/2014
7. Insights from diffusion imaging of pediatric brain tumors. The Ohio State University Department of Neurosurgery Grand Rounds, Columbus, OH, 9/11/2014, and University of Florida Department of Neurosurgery Grand Rounds, Gainesville, FL, 9/30/2014
8. Pediatric brain tumors before, during, and after the operating room. Lucile Packard Children's Hospital Operating Room Continuing Education Series. Stanford, CA. 5/4/2015
9. Imaging of pediatric brain tumors: data on the cutting room floor. 4th Annual Wright State University and Premier Health Neuroscience Institute Symposium. Dayton, OH. 10/23/2015
10. The virtual biopsy of an unresectable tumor. Department of Neuroscience, Cell Biology and Physiology Seminar Series, Wright State University. Dayton, OH. 11/6/2015
11. A new resource for basic science at Dayton Children's Hospital. Research Roundtable on Childhood Obesity, Wright State University Research Park. Dayton, OH. 9/15/2016
12. Brain tumors at Dayton Children's Hospital- On the front lines and in the war room. Dayton Children's Hospital Board of Trustees Annual Meeting. Dayton, OH. 10/21/2016
13. Prehospital evaluation of neurological injury. Emergency Medical Service Providers Symposium. Dayton Children's Hospital. Dayton, OH. 4/29/2017
14. Pediatric neurologic emergencies. Pediatric Fundamental Critical Care Support Course. Wright State University Boonshoft School of Medicine, Dayton, OH. 5/12/2017
15. Repression of tumor suppressor genes in DIPG. The Art and Science of Healing, Mayfield Education and Research Foundation. Cincinnati, OH. 4/14/2018.
16. Dinner with a Doc: Update on Dayton Children's Tumor Bank and research collaborations. Dayton Children's Hospital. Dayton, OH. 6/4/2018.
17. The role of tumor suppressor genes in DIPG treatment resistance. Department of Neuroscience, Cell Biology and Physiology Seminar Series, Wright State University. Dayton, OH. 9/14/2018.
18. Dayton Children's Hospital at the Children's Brain Tumor Tissue Consortium. CBTTC 5th Annual Investigator's Meeting. Philadelphia, PA. 3/10/2019.
19. The Living Biobank at Dayton Children's Hospital. Planned Giving Advisory Meeting at Dayton Children's Hospital, 7/24/2019, and Centerville Noon Optimist Club, Centerville, OH, 9/17/2019.
20. Proponent Testimony for Ohio House Bill 37: Revise law about nuisance, dangerous, vicious dogs, Criminal Justice Subcommittee on Criminal Sentencing, Ohio House of Representatives, Columbus, OH. 9/25/2019
21. Children's Brain Tumor Foundation webinar for parents of children with diffuse intrinsic pontine glioma. 9/25/2019.