

Professional Activities

Elizabeth Tyler-Kabara MD, PhD

ORIGINAL ARTICLES

1. **Tyler EC**, Horton MR, Krause PR. A review of algorithms for molecular sequence comparison. *Computers and Biomedical Research*. **24**: 72-96, 1991.
2. Lovinger DM, **Tyler E**, Fidler S, Merritt A. Properties of a presynaptic metabotropic glutamate receptor in rat neostriatal slices. *Journal of Neurophysiology*. **69**:1236-44, 1993.
3. Lovinger DM, **Tyler EC**, Merritt A. Short- and long-term synaptic depression in rat neostriatum. *Journal of Neurophysiology*. **70**: 1937-49, 1993.
4. **Tyler EC**, Lovinger DM. Metabotropic glutamate receptor modulation of synaptic transmission in corticostriatal co-cultures: Role of calcium influx. *Neuropharmacology*. **34**: 939-52, 1995.
5. Lovinger DM, **Tyler E**. Synaptic transmission and modulation in the neostriatum. *International Review of Neurobiology*. **39**: 77-111, 1996.
6. Albright AL, **Tyler-Kabara E**. Slit-ventricle syndrome secondary to shunt-induced suture ossification. *Neurosurgery*. **48**: 145-173, 2001.
7. Kondziolka D, **Tyler-Kabara E**, Achim C. Cellular therapies for neurodegenerative disease. *Clinical Neurosurgery*. **48**: 145-173, 2001.
8. **Tyler-Kabara E**, Kondziolka D, Flickinger JC, Lunsford LD. Stereotactic radiosurgery for residual neurocytoma. Report of four cases. *Journal of Neurosurgery*. **95**(5): 879-882, 2001.
9. Mendelson SA, Dominick T, **Tyler-Kabara E**, Moreland M, Adelson PD. Early versus late femoral fracture stabilization in multiply injured pediatric patients with closed head injury. *Journal of Pediatric Orthopaedics*. **96**(3): 527-531, 2002.
10. **Tyler-Kabara EC**, Kassam AB, Horowitz MH, Urgo L, Hadjipanayis C, Levy EI, Chang YF. Predictors of outcome in surgically managed patients with typical and atypical trigeminal neuralgia: comparison of results following microvascular decompression. *Journal of Neurosurgery*. **96**(3): 527-531, 2002.
11. Kondziolka D, Wechsler L, **Tyler-Kabara E**, Achim C. The role cell therapy for stroke. *Neurological Focus*. **13**(5): Article 1, 2002.
12. Hadjipanayis CG, Niranjana A, **Tyler-Kabara E**, Kondziolka D, Flickinger JC, Lunsford LD. Stereotactic radiosurgery for well-circumscribed fibrillary grade II astrocytomas: An initial experience. *Stereotactic and Functional Neurosurgery*. **79**: 13-24, 2002.
13. Tubbs RS, **Tyler-Kabara EC**, Wellons JC, Blount JP, Oakes WJ. Unusual findings during abdominal placement of a ventriculoperitoneal shunt – Report of three cases. *Journal of Neurosurgery*. **102**(4): 423-425, 2005.

14. Tubbs RS, **Tyler-Kabara EC**, Aikens AC, Martin JP, Weed LL, Salter EG, Oakes WJ. Surgical anatomy of the dorsal scapular nerve. *Journal of Neurosurgery*. **102**(5): 910-911, 2005.
15. Tubbs RS, **Tyler-Kabara EC**, Aikens AC, Martin JP, Weed LL, Salter EG, Oakes WJ. Surgical anatomy of the dorsal scapular nerve. *Journal of Neurosurgery*. **102**(5): 912-914, 2005.
16. Blount JP, Tubbs RS, Okor M, **Tyler-Kabara EC**, Wellons JC, Grabb PA, Oakes WJ. Supraplaxode spinal cord transection in paraplegic patients with myelodysplasia and repetitive symptomatic tethered spinal cord. *Journal of Neurosurgery*. **103**(1): 36-36, 2005.
17. Tubbs RS, **Tyler-Kabara EC**, Salter EG, Oakes WJ. Unusual findings of the craniocervical junction. *Clinical Anatomy*. **18**(6): 449-451, 2005.
18. Tubbs RS, **Tyler-Kabara EC**, Salter EG, Sheetz J, Zhren SJ, Oakes WJ. Additional vascular compression of the brachial plexus in a cadaver with a cervical rib: case illustration. *Surgical and Radiologic Anatomy*. **28**(1): 112-113, 2006
19. Tubbs RS, **Tyler-Kabara EC**, Oakes WJ. Unilateral occipital hyperhidrosis following Chiari I decompression: case report and a review of the literature. *Child's Nervous System*. **22**(7): 737-739, 2006.
20. Pirris SM, Pollack IF, Snyderman CH, Spiro RM, **Tyler-Kabara E**, Kassam AB. Corridor surgery: the current paradigm for skull base surgery. *Child's Nervous System*. **23**(4): 377-384, 2007.
21. Albright, AL, **Tyler-Kabara, E**. Combined ventral and dorsal rhizotomies for dystonic and spastic extremities: Report of six cases. *Journal of Neurosurgery*. **107**(4): 324-327, 2007.

CONFERENCE PRESENTATIONS

* Presenting author

1. **Tyler-Kabara EC***, Kassam AB, Horowitz M, Urgo L, Hadjipanayis C, Yonas H, Jannetta P. Management of atypical trigeminal neuralgia: Predictors of outcome for microvascular decompression. *Congress of Neurological Surgeons*. San Antonio, TX, September 27, 2000.
2. **Tyler-Kabara EC***, Kassam AB, Horowitz M, Urgo L, Hadjipanayis C, Yonas H, Jannetta P. Management of trigeminal neuralgia: Predictors of outcome for microvascular decompression. *Congress of Neurological Surgeons*. San Antonio, TX, September 27, 2000.
3. **Tyler-Kabara EC**, Martinez AJ*, Lunsford LD. Diagnosis of deep-seated brain lesions by image guided stereotactic needle biopsy: A 20 year experience. *International Congress of the International Academy of Pathology*. Nagoya, Japan, October 15-17, 2000.
4. Hadjipanayis CG*, Niranjana A, **Tyler-Kabara EC**, Konziolka D, Flickinger JC, Lunsford LD. Stereotactic radiosurgery for well circumscribed fibrillary grade II astrocytomas: An initial experience. *Neuro-Oncology 2002: Current Concepts Meeting*. Naples, FL, February 10-12, 2001.
5. Medelson SA*, Dominick T, **Tyler-Kabara E**, Adelson PD, Moreland M. Early vs. late femoral fracture stabilization in multiple injured pediatric patients with closed head injury. *American Academy of Orthopedic surgeons*. San Francisco, CA, February 28-March 4, 2001.

6. Kondziolka D*, **Tyler-Kabara E**, Flickinger JC, Lunsford LD. Stereotactic radiosurgery for residual neurocytomas: A radiosensitive tumor. *International Stereotactic Radiosurgery Society congress*. Las Vegas, NV, June 12, 2001.
7. **Tyler-Kabara EC*** and Albright AL. Slit-ventricle syndrome secondary to shunt-induced craniostenosis. *Neuro+Science+Management*. New Orleans, LA, December 6-8, 2001.
8. Balzer J, Welch W, **Tyler-Kabara E***, Gerszten P, Sclabassi R. Intraoperative monitoring during interbody fusion. *North American Spine Society*. Montréal, QB, October 29-November 2, 2002.
9. Welch WC*, Balzer J, **Tyler-Kabara E**, Gerszten P, Sclabassi R. Intraoperative monitoring during interbody fusion. *Winter Neuroscience Symposium*. Snowmass, CO, February 23-28, 2003.
10. **Tyler-Kabara EC***, Liu Y-J, Gobbel GT, Kondziolka, D. High yield differentiation of neurons from rat neural progenitor cells. *American Society for Stereotactic and Functional Neurosurgery*. New York, NY, May 18-21, 2003.
11. **Tyler-Kabara EC***, Liu Y-J, Gloriosos JC, Chen C, Hong CS, Kondziolka D, Gobbel GT. Increasing neuronal yield by co-cultivation of adult neural progenitors with PA6 cells. *Society for Neuroscience*. New Orleans, LA, November 8-12, 2003.
12. **Tyler-Kabara EC***, Tubbs RS, Wellons JC, Blount JP, Oakes WJ. Supra-placode spinal cord transection for paraplegic patients with myelodysplasia and repetitive symptomatic tethered spinal cord. *AANS/CNS Section on Pediatric Neurological Surgery*. San Francisco, CA December 8-11, 2004.
13. **Tyler-Kabara EC***, Tubbs RS, Wellons JC, Blount JP, Oakes WJ. Posterior cranial fossa volume in patients with rickets: Insights into the increased occurrence of Chiari I malformations in metabolic bone disease. *AANS/CNS Section on Pediatric Neurological Surgery*. San Francisco, CA, December 8-11, 2004.
14. **Tyler-Kabara EC***, Tubbs RS, Blount JP, Wellons JC, Oakes WJ. Vagus nerve stimulation for induced spinal cord seizures: Insights into seizure cessation. *AANS/CNS Section on Pediatric Neurological Surgery*. San Francisco, CA, December 8-11, 2004.
15. Balzer JR*, Welch WC, **Tyler-Kabara E**, Gerszten P, Sclabassi R. Intraoperative somatosensory evoked potentials and electromyographic recording during anterior and posterior lumbar interbody fusion. *American Society of Neurophysiological Monitoring*. San Diego, CA, May 4-7, 2007.
16. Albright AL*, **Tyler-Kabara E**. Cortical motor stimulation for focal dystonia. *AANS/CNS Section on Pediatric Neurological Surgery*. Miami Beach, FL, November 27-30, 2007.
17. Amin DV*, Kassam A, **Tyler-Kabara E**, Lunsford LD. Endoport neurosurgery: Air medium endoscopic intraventricular tumor resection. *AANS/CNS Section on Pediatric Neurological Surgery*. Miami Beach, FL, November 27-30, 2007.

BOOK CHAPTERS

1. Kondziolka D, **Tyler-Kabara E**, Achim C. Neural Transplantation, in Ramachandran VS (ed): *Encyclopedia of the Human Brain*, academic Press, pp 385-402, 2002.
2. Marion DM, Sharts MC, **Tyler-Kabara EC**, Craniocerebral Trauma, in Bradley WG (ed): *Neurology in Clinical Practice, 4th Edition*, Elsevier, pp 1127-1148, 2003.
3. **Tyler-Kabara EC**, Oakes JO. Chiari malformation and syringomyelia, in Kim DH, Betz RR, Huhn SL, Newton PO (eds): *Surgery of the Pediatric Spine*, Thieme, pp 148-171, 2008.
4. **Tyler-Kabara EC**, Oakes JO. Chiari Malformations and Syringohydromyelia in Children, in Goodrich JT (eds): *Neurological Operative Atlas 2E: Pediatric Neurosurgery*, Thieme, 2008. (in press)
5. **Tyler-Kabara EC**, Oakes JO. Tethered Spinal Cord, Intramedullary Spinal Lipoma, and Lipomyelomeningocele, in Goodrich JT (eds): *Neurological Operative Atlas 2E: Pediatric Neurosurgery*, Thieme, 2008. (in press)
6. **Tyler-Kabara EC**, Morawetz, RB, Oakes JO. Surgical Management of Chiari I Malformations and Syringomyelia, in Goodrich JT (eds): *Neurological Operative Atlas 2E: Pediatric Neurosurgery*, Thieme, 2008. (in press)

POSTERS

1. Lovinger DM, **Tyler E**, and Merritt A. Properties of a Glutamate Autoreceptor in Rat Neostriatum. *Society for Neuroscience*. Anaheim, CA, October 25-30, 1992.
2. **Tyler EC**, Lovinger DM, and Merritt A. Short & Long-Term Synaptic Depression in The Neostriatum. *Society for Neuroscience*. Anaheim, CA, October 25-30, 1992.
3. **Tyler EC**, Lovinger DM, and Merritt A. Reversal of Presynaptic Metabotropic Receptor Function by PKC: Interactions with Efficacy of Transmission. *Society for Neuroscience*. Washington, DC, November 7-12, 1993.
4. **Tyler EC** and Lovinger DM. A New Technique for Comparing Evoked and Spontaneous Synaptic Transmission at Corticostriatal synapses. *Society for Neuroscience*. Miami, FL, November 13-18, 1994.
5. **Tyler EC**, Popp RL, and Lovinger DM. Further Characterization of mGluR Modulation of Synaptic Transmission in Corticostriatal Co-Cultures. *Society for Neuroscience*. San Diego, CA, November 11-16, 1995.
6. **Tyler EC** and Lovinger DM. PKC Enhances Synaptic Transmission and Blocks Modulation by Metabotropic Glutamate Receptors at Corticostriatal Synapses. *International Conference on Second Messengers and Phosphoproteins*. Nashville, TN, October 27-November 1, 1995.
7. Lovinger DM, Choi S, **Tyler EC**. Mechanisms underlying mGluR inhibition of synaptic transmission. *Metabotropic Glutamate Receptors*. 1996.

8. **Tyler-Kabara EC**, Wahlig J, Balzer J, Gerszten PC, Welch WC. The use of neurophysiologic monitoring during anterior and posterior lumbar interbody fusion. *AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves*. Palm Springs, CA, February 23-26, 2000.
9. **Tyler-Kabara EC**, Wahlig J, Balzer J, Gerszten PC, Welch WC. Use of neurophysiologic monitoring during anterior and posterior lumbar interbody fusion. *American Association of Neurological Surgeons*. San Francisco, CA, April, 2000.
10. **Tyler-Kabara EC**, Bullian, L, Darby JM, and Marion DW. Prophylactic antibiotics and hospital location for placement of ventriculostomy catheters do not influence the incidence of catheter related CNS infections in patients with severe traumatic brain injury. *American Association of Neurological Surgeons*. San Francisco, CA, April, 2000.
11. Hadjipanayis CG, Niranjan A, **Tyler-Kabara EC**, Kondziolka D, Flickinger JC, Lunsford LD. Stereotactic radiosurgery for well circumscribed fibrillary grade II astrocytomas: An initial experience. *Congress of Neurological Surgeons*. San Diego, CA, September 29-October 4, 2001.
12. **Tyler-Kabara EC**, Kondziolka D, Flickinger JC, and Lunsford LD. Stereotactic radiosurgery for residual neurocytomas: New approaches for a radiosensitive tumor. *Congress of Neurological Surgeons*. San Diego, CA, September 29-October 4, 2001.
13. Stauffer WR, Fellows-Mayle W, Niranjan A, **Tyler-Kabara E**, Hong CS, Glorioso J, and Gobbel GT. Brain irradiation enhances survival of neural progenitor allografts transplanted into normal and tumor-bearing brains. *Society for Neuroscience*. Orlando, FL, November 7, 2002.
14. Pirris, SM, **Tyler-Kabara E**. Telemedicine: The use of cell phone pictures in pediatric neurosurgery. *AANS/CNS Section on Pediatric Neurological Surgery*. Miami Beach, FL, November 27-30, 2007.
15. Amin, DV, Prevedello D, Gardner P, **Tyler-Kabara E**, Kassam A. Endoscopic endonasal decompression of the sella for visual deficits in the setting of pituitary hypertrophy. *AANS/CNS Section on Pediatric Neurological Surgery*. Miami Beach, FL, November 27-30, 2007.

INVITED LECTURES, NATIONAL

1. Tyler EC. *Health Education Personalized*. American Medical Student Association Health Education Personalized Orientation. Reston, VA, 1992.
2. Tyler-Kabara, EC. *2009 MD/PhD Student Conference*. 24th Annual National MD/PhD Student Conference. Keystone, CO, July 24-26 2009.

INVITED LECTURES, REGIONAL

1. Tyler-Kabara, EC. *NeuroTrauma Update*. Stat MedEvac Nursing Symposium. Seven Springs, PA, October 19, 2001.
2. Tyler-Kabara EC. *Traumatic Brain Injury in Pediatric Patients*. Trends and Treatments of Trauma 2006. Hamot Medical Center, Erie, PA September 29, 2006.

3. Tyler-Kabara EC. *Neurosurgical Treatment of Cerebral Palsy Movement Disorders*. A Team Approach to Spasticity and Movement Disorders in CP. Station Square, Pittsburgh, PA November 1, 2006

INVITED LECTURES, LOCAL

1. *Women and Medical School*, panel member, Vanderbilt University Women's Center. Nashville, TN, 1992.
2. *Women in Surgery*, panel member, University of Pittsburgh School of Medicine, Pittsburgh, PA 2001.
3. Tyler-Kabara, EC. *ICU Management of Head Trauma*. Presbyterian NeuroICU In-Service: UPMC Presbyterian, Pittsburgh, PA October 18, 2001.
4. Interpersonal and Communication Skills, panel member, UPMC/University of Pittsburgh Resident and Fellow Orientation. Pittsburgh, PA June 17, 2003.
5. Tyler-Kabara, EC. *Big Head Todd and the Monsters: Macrocephaly and Positional Plagiocephaly vs. Hydrocephalus and Craniosynostosis*. Pediatric Grand Rounds. Children's Hospital of Pittsburgh. Pittsburgh, PA June 29, 2006.
6. Tyler-Kabara, EC. *Chiari Malformations*. ENT Morning Conference. Children's Hospital of Pittsburgh. Pittsburgh, PA December 7, 2006.
7. Tyler-Kabara, EC. *Radiographic Findings in Pediatric Head Trauma*. Critical Care Teaching Conference. Children's Hospital of Pittsburgh. Pittsburgh, PA February 27, 2007.
8. Tyler-Kabara, EC. *Neurosurgical Treatment of Movement Disorders*. Anesthesia Teaching Conference. Children's Hospital of Pittsburgh. Pittsburgh, PA February 28, 2007.
9. Tyler-Kabara, EC. *Lumps, Pits, and Spots*. NICU Grand Rounds. Magee Women's Hospital. Pittsburgh, PA December 6, 2007.
10. Tyler-Kabara, EC. *Neurosurgical Treatment of Movement Disorders*. Anesthesia Teaching Conference. Children's Hospital of Pittsburgh. Pittsburgh, PA February 27, 2008.
11. Tyler-Kabara, EC. *Neurosurgical Treatment of Pediatric Movement Disorders*. Grand Rounds, The Children's Institute. Pittsburgh, PA April 9, 2008.
12. Tyler-Kabara, EC. *Positional Plagiocephaly – Unintended Consequences of “Back to Sleep.”* Current Topics in Neonatal Intensive Care. Allegheny General Hospital. Pittsburgh, PA April 10, 2008
13. Tyler-Kabara, EC. *Medical & Surgical Treatment of Movement Disorders*. Grand Round Series for Continuing Education. Children's Hospital of Pittsburgh. Pittsburgh, PA October 30, 2008
14. Tyler-Kabara, EC. *The Fellows Lecture Series* Children's Hospital of Pittsburgh. Pittsburgh, PA January 28, 2009..

PROFESSIONAL TEACHING ACTIVITIES

1991-1992	Tutor	Anatomy and Microbiology, Vanderbilt University
1991-1992	Coordinator	MSTP summer Seminar Series, Vanderbilt University
1995	Tutor	Clinical Research, Vanderbilt University, School of Nursing
1999-2001	Instructor	Neuroanatomy and Neurotrauma, University of Pittsburgh,
Center for		Continuing Education in the Health Sciences
1999-2003	Curriculum Director	Neurosurgery Boards Review Course, University of Pittsburgh,
Department		of Neurosurgery
2001-2004	Instructor	Sulzer SpineTech, Center for Excellence Spine Course
2005-Present	Ph.D. Committee	William Stauffer, Bioengineering, University of Pittsburgh
2007-Present	Ph.D. Advisor	Alan Degenhart, Bioengineering, University of Pittsburgh
2008-Present	Course Director	NSURG 5705 Neurosurgery and Head and Neck Dissection