Neurosurgery, Galilee Medical Center

Nahariya

Herzel 147/8 Nahariya' ISRAEL

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PERSONAL INFORMATION:

Date of Birth: September 11, 1964 Place of Birth: Mexico City, Mexico

Citizenship: Mexico

CURRENT PROFESSIONAL APPOINTMENTS

- 2013 Staff, Department of Neurosurgery, Western Galilee Medical Center, Nahariya ISRAEL
- 2003 11 Associate Staff, Department of Neurosurgery, Cleveland Clinic, OH, USA
- 2003 11 Chief of Neurosurgery, Huron Hospital, East Cleveland, OH USA.

A Level II trauma center. Over 25,000 ER visits/year, more than 1400 surgical trauma per year.

Responsibilities include:

Outpatient clinic, preoperative, operative and postsurgical care of patients with neurosurgical pathology.

Education of general surgery residents rotating in Trauma Service, daily rounds on admitted patients in the ICU or floors, review all trauma admissions with residents. Consults for in-hospital patients.

Developed a technique for early decompression of the brain after sustaining a severe injury. During my tenure in this position, the mortality at our institution in patients with traumatic acute subdural hematomas is below 12%, in comparison to the national average mortality of 30-40%. Unusually high penetrating injuries in general trauma including neurotrauma (2x the national average).

Patients who sustained an isolated penetrating gunshot wound to the head and brain and arrived alive to the hospital ER, under my guidance have undergone early decompressive craniectomy with a surgical mortality of 9%. These results are being processed for publication.

Have recertified on three occasions the Level II status as required by the American College of Surgeons Committee on Trauma.

Serve in the Trauma Committee and Disasters committee of Huron Hospital

EDUCATION

- 1971-1976 Elementary school: Nuevo Colegio Israelita I.L. Peretz, Mexico City, Mexico
- 1976-1979 High school: Nuevo Colegio Israelita I.L. Peretz, Mexico City, Mexico
- 1979-1982 Preparatory school: Nuevo Colegio Israelita I.L.Peretz, Mexico City, Mexico
- 1984-1990 Medical School: Faculty of Medicine, National Autonomous University of Mexico, Mexico.
- 1989-1991 Social Service at the Cellular Physiology Institute, National Autonomous University of Mexico, Mexico.

Research project: "Cultures of fetal rat adrenal chromaffin cells", Mentor: Dr. Renee Drucker-Colin

- 1. Developed an effective method of separation and culture of fetal chromaffin cells for use in different ongoing research projects with parkinson's disease models.
- 2. Initiated a spinal cord injury rat model for transplantation of fetal spinal cord and electromagnetic stimulation.

Grants:

Effects of electrical stimulation on the morphological and functional regeneration in Animals with spinal cord and cortical injuries, transplanted with fetal neural tissue.

Presentations:

Phenotypic changes of fetal chromaffin cells transplanted with mouse submaxillary gland into the head of the caudate nucleus and lateral ventricle respectively, of the adult rat brain. III National Students Congress on Health Area Research, UNAM, Mexico City, 1989.

1991-1992 1st year General Surgery residency at the American British Cowdray Hospital in Mexico City. One year prerequisite to enter the residency in Neurosurgery. Rotations included general surgery, orthopedics, plastic surgery, neurosurgery, intensive care unit and ENT.

Poster presentation: "Laryngocele" at the XVI National Congress of General Surgery on Nov. 12, 1992 in Acapulco, Mexico.

1992-1997 Residency in Neurosurgery. National Institute of Neurology and Neurosurgery, Mexico City, Mexico.

Responsibilities include Grand Rounds, daily care of patients admitted to the hospital and in the emergency room, preoperative assessment, operative and postoperative care of patients with neurosurgical disorders. Outpatient clinic two days per week.

Research Project:

"Cavernous malformations of the brain: Natural history and treatment". This study helped define the role of surgery in the management of these rare vascular lesions. "Familial cavernous malformations in Hispanic families" In conjunction with the Department of Genetics of the University of Wisconsin. Involved the genetic study of individuals who have at least one family member with known cavernous malformations in the brain or multiple cavernous malformations of the brain.

Presentations:

Poster: "Transendoscopic Interforniceal Ventriculostomy. VIII Annual Research Reunion, National Institute of Neurology and Neurosurgery, May 1993.

Poster: "Spinal Intramedullary tuberculoma" X World Congress of Neurosurgery, October 1993, Acapulco, Mexico.

Lecture: "Plicadura, arteriotomia y recubrimiento con pericardio de bovino en la arteria carotida primitive del perro" XI Annual Research Reunion, National Institute of Neurology and Neurosurgery, May, 1996. Emphasized the use of biological alternatives to reconstruct experimentally damaged or injured carotid arteries dogs and evaluation with magnetic resonance angiography to measure flow and intravascular/graft turbulence.

Publications:

Book Chapter: Verdura J, Tobias S: Granulomatous diseases of the Central Nervous System. In Youmans (Ed) *Neurological Surgery* 4th Ed. Saunders, Philadelphia: 3266-3269, 1996.

Thesis Dissertation to receive the certification of Neurosurgery "Cavernous Malformations: Analysis of its natural history and treatment" March 1997, Mexico, received honorary mention.

Exchange fellowship

Thomas Jefferson University and Jefferson Medical College, Philadelphia, PA. Spent one year as senior resident under Dr. Frederick Simeone, Chairman of the department of neurosurgery, Jefferson Medical College, Philadelphia. Mainly spine surgery cases. June 1996- September 1997.

- Board certification. Mexican Council of Neurological Surgery, Mexico
- 1997 United States Medical Licensing Exams: Approved Step 1 and Step 2
- 1997 TOEFL accreditation
- 1997-1998 Fellowship in Clinical Neurosurgery and skull base surgery, Department of Neurosurgery, Hadassah University Hospital, Jerusalem, Israel. Mentor: Professor Felix Umansky, Chairman of the department of neurosurgery.

Performed over 150 surgeries, mostly skull base tumors and vascular lesions. Taught residents the basic surgical approaches in neurosurgery and led weekly lectures for residents. On call for any neurosurgical emergency 15 days per month. Outpatient clinic 2 days per week

Presentations:

Meningiomas of the anterior cranial fossa. European Training Course. European Association of Neurosurgery. Madeira, Portugal 1998.

Luncheon Seminar: "Skull Base Surgery: Complications and how to avoid them" Congress of Neurological Surgeons, Seattle USA, 1998. Presented by co-author Professor Felix Umansky, Chairman of the department of neurosurgery, Hadassah hospital, Jerusalem, Israel.

- 1999-2001 Appointed staff, Department of Neurosurgery, Hadassah University Hospital, Jerusalem, Israel.
- 2001-2003 Fellowship: Skull Base Surgery, Cleveland Clinic Foundation, Cleveland, OH USA. Mentor: Dr. Joung H. Lee, Chairman of division of skull base surgery, department of neurosurgery, Cleveland Clinic.

During the first year, conducted research in genetic study of meningiomas of the skull base, Genechip analysis. The second year mainly clinical. Over 120 surgeries for pathology of the Skull Base including tumors, vascular lesions and microvascular decompression in trigeminal neuralgia.

Presentations:

Poster presentation:"Efficacy of Microvascular Decompression for Trigeminal Neuralgia in the Elderly", 71st American Association of Neurological Surgeons Annual Meeting, April ,2001, San Diego, CA, USA

APPOINTMENTS

- 1999-2001 Associate Staff, Department of Neurosurgery, Hadassah University Hospital, Ein Kerem, Jerusalem Israel.
- 2003-2011 Associate Staff, Department of Neurosurgery, Cleveland Clinic, Cleveland, OH, USA
- 2003-2011 Chief of Neurosurgery, Huron Hospital, East Cleveland, OH USA

HONORS AND AWARDS

- Third place in Academic Achievement, Faculty of Medicine, National Autonomous University of Mexico, Mexico City, Mexico
- 2001-2003 Recipient of the "Razavi scholarship" for clinical scholars, Cleveland Clinic, Cleveland OH USA,
- Fellow of the American Association of Neurological Surgeons (FAANS), July 18th.

PRESENTATIONS

- "Cambios Fenotipicos de Celulas Cromafines Fetales Transplantadas con Glandula Submaxilar de Raton a la Cabeza del Nucleo Caudado y Ventriculo Lateral Respectivamente de la Rata Adulta" (Phenotypic change of fetal chromaffin cells transplanted with mouse submaxillary gland to the head of the caudate nucleus and lateral ventricle respectively of the adult rat brain), III National Students Congress on Health Area Research, October, Faculty of Medicine, National Autonomous University of Mexico, Mexico City.
- Poster presentation: "Laryngocele", XVI National Congress of General Surgery, November 12th, Acapulco, Mexico

1993 Poster presentation: "Transendoscopic Interforniceal Ventriculostomy", VIII Annual Research Reunion, National Institute of Neurology and Neurosurgery, May, Mexico City. 1993 Poster presentation: "Spinal Intramedullary Tuberculoma",X World Congress of Neurosurgery, October 17 – 22, Acapulco, Mexico. 1996 Oral presentation: "Plicadura, Arteriotomia y Recubrimiento con Pericardio de Bovino en la Arteria Carotida Primitiva del Perro", XI Annual Research Reunion, National Institute of Neurology and Neurosurgery, May 23rd, Mexico City. Meningiomas of the anterior cranial fossa. European Training Course European 1998 Association of Neurosurgery, Madeira, Portugal. (Presented by co author Felix Umansky, MD). 1998 Luncheon Seminar: Skull Base Surgery: Complications and How to Avoid Them. Congress of Neurological Surgeons, Seattle, USA. (Presented by co-author Felix Umansky, MD). 1999 The use of "classical" standard approaches to the Skull Base. The tri-national meeting of the Israeli, German and Finish neurosurgical societies. January, Eilat, Israel. 2001 Foramen Magnum Tumors, World Federation of Neurosurgical Societies, January 6th, Singapore. 2003 Poster presentation: "Efficacy of Microvascular Decompression for Trigeminal Neuralgia in the Elderly", 71st American Association of Neurological Surgeons Annual Meeting, April 29th, San Diego, CA, USA. 2004 Neuroepithelial Tumors Medical Grand Rounds. October 4, Huron Hospital, Cleveland, OH, USA Guest Speaker: "Traumatic Brain Injury", 14th Annual Huron Trauma Symposium-2008 From Scene to Scalpel, September 6, Cleveland OH, USA Poster presentation: "Early Wide Decompressive Craniectomy as Initial Treatment 2008 of Traumatic Acute Subdural Hematomas", 67th Annual Meeting of the American Association for the Surgery of Trauma, September 27, Maui, HI, USA

1992

2009 Guest Speaker: "Early wide decompressive craniectomy as initial treatment of Acute Subdural Hematomas", 15th Annual Huron Trauma Symposium, September 12, Cleveland, OH USA 2010 Huron Hospital Grand Rounds: Early wide decompressive craniectomy and brain compartmental syndrome, March 29, Cleveland, OH USA Guest speaker:: "Penetrating Brain Injuries: Gunshot wounds", 16th Annual 2010 Fairview and Huron Hospital Trauma Symposium October 2, Cleveland, OH. USA 2013 Speaker: "Early wide decompressive craniectomy in traumatic acute subdural hematomas", Meeting of the Israel Neurosurgical Society, May 17, Herzliya, **ISRAEL** 2014 Speaker: "Crossing Over: Wounded Syrian Nationals Treated in Israel. Experience of the Department of Neurosurgery, Western Galilee Medical Center, Nahariya. Meeting of the Israel Neurosurgical Society, March, 19 Jerusalem. 2015 Speaker" Early Radical Decompressive Craniectomy in Missile Penetrating Brain Injury, Meeting of the Israel Neurosurgical Society, March 13. Kfar Bloom **ACADEMIC COURSES** 1986 Lineamientos sobre el manejo del paciente traumatizado (Guidelines in the management of trauma patients), June 21 – 25, Hospital Xoco, Mexico, DF, Mexico. IX National Congress of Internal Medicine, July 19 – 22, Acapulco, Mexico. 1986 Symposium: "The Internist and the Acid-Peptic Disease", July 21st, Acapulco, 1986 Mexico. Symposium: "Thrombosis: Risk Factors", November 29th, Mexico, DF, Mexico. 1986 1987 Scientific activities of The National Institute of Neurology and Neurosurgery, February 24 - 27, Mexico, DF, Mexico. Symposium: "Avoidance of Mechanisms Underlying 1987 Hypertension-Related Damage", May 3 - 5, Mexico City. 1987 Critical Medicine and Intensive Care. October 14 – 16, National Institute of Pediatrics, Mexico City. 1987 Pediatric Neurophysiology. December 2 – 4, National Institute of Pediatrics, Mexico City. "Primer Curso de Artroplastia de Baja Friccion Charnley" (First course of low 1991

friction Charnley hip arthroplasty), August 24th, ABC Hospital, Mexico City.

XVI National Congress of General Surgery, October 17 – 22, Acapulco, Mexico.

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1993	Symposium: "Urban Pathology", March 27 th , National Institute of Neurology and Neurosurgery, Mexico City.
1993	IV International Symposium of Interventional Neuroradiology, October 14 – 17,
	Mexico City.
1993	X World Congress of Neurosurgery, October 17 – 22, Acapulco, Mexico.
1995	International Course: Controversies in Neurosciences, February 20 – 25, Mexico
	City.
1995	X Annual Research Reunion, National Institute of Neurology and Neurosurgery,
	May 18 – 19, Mexico City.
1995	1 st Mexican Brain-Attack Reunion, December 4 – 5, Mexico City.
1996	XI Annual Research Reunion, National Institute of Neurology and Neurosurgery,
	May 24 – 25, Mexico City.
1999	The tri-national meeting of the Israeli, German and Finish Neurosurgical
	Societies, February, Eilat, Israel.
2001	69th American Association of Neurological Surgeons Annual Meeting, May,
2002	Toronto, Canada.
2002	Symposium: Techniques of Epilepsy Surgery, August 23 – 25, The Cleveland
2002	Clinic Foundation. Cleveland, OH, USA.
2002	Congress of Neurological Surgeons, September 22 – 25, Philadelphia, PA, USA.
2003	71 st American Association of Neurological Surgeons Annual Meeting, April 26 - May 1 st , San Diego, CA, USA.
2003	Spine Review Hands-on, August 14-20, Cleveland, OH,USA.
2003	Spille Review Hallus-oli, August 14-20, Cleveland, OH, OSA.
2003	Gamma Knife Radiosurgery Course, September 22-26, Cleveland Clinic
	Foundation, Cleveland, OH, USA.
2004	Advance Trauma Life Support Course. May 7-8, Metro Hospital, Cleveland, OH,
	USA.
2005	73 rd American Association of Neurological Surgeons Annual Meeting, , April 17–
	21, New Orleans, LA, USA.
2005	Attendance "Excessive bleeding during neurosurgery: What are the management
	options? April 19, New Orleans, LA, USA.
2006	74 th American Association of Neurological Surgeons Annual Meeting, April 22 –
	27, San Francisco, CA, USA.
2006	Breakfast Seminar: "Cerebral Trauma State-of-the-Art Treatment, AANS, April
	24, San Francisco, CA, USA.
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2006	Breakfast Seminar: "Pituitary Tumors: State-of-the-Art, April 26, AANS, San
	Francisco, CA, USA.

2007	Contemporary Issues in Pituitary Disease: Case-based Management. Cleveland Clinic, March 2 nd . Cleveland OH, USA
2007	75 th American Association of Neurological Surgeons Annual Meeting, April 14 – 19. Washington DC, USA
2007	Breakfast Seminar: "Cerebral Trauma: State of the art treatment" AANS, April 17 Washington, DC, USA
2007	Breakfast Seminar: "Evidence based medicine and outcome studies" AANS, April 18, Washington DC, USA
2007	Seminar: Therapeutic options for managing extracellular matrix deficits in difficult to heal wounds. August 30, Huron Hospital, Cleveland, Ohio. USA
2007	Huron Hospital : "Trauma Symposium", September 22, Cleveland Ohio, USA
2007	American Association for the Surgery of Trauma. 66 th meeting, September 27 – 29, Las Vegas, Nevada, USA
2007	Luncheon Seminar: "Management of Carotid and Vertebral Arterial Injuries" AAST, September 27, Las Vegas, Nevada, USA
2007	Luncheon Seminar: "What's New – Military Session" AAST, September 28, Las Vegas, Nevada, USA
2008	National Neurotrauma Symposium, July 27 – 30, Orlando FL, USA
2008	14 th Annual Huron Trauma Symposium, "From Scene to Scalpel" September 6, Cleveland OH, USA
2008	67^{th} Annual Meeting of the American Association for the Surgery of Trauma, September $24-27$, Maui HI, USA
2009	15 th Huron Hospital Annual Trauma Symposium: Multisystem Trauma Update, September 12, Cleveland, OH, USA
2010	78^{th} Annual Meeting of the Americam Association of Neurological Surgeons, May $1-5$, Philadelphia, PA, USA
2010	AANS Breakfast Seminar: Management of Acute Spinal Cord Injury, May 3, Philadelphia, PA, USA
2010	AANS Breakfast Seminar: Cerebral Trauma, May 4, Philadelphia, PA, USA
2010	Huron Trauma Symposium, From site to ICU, Oct 2m Cleveland, OH, USA

PUBLICATIONS

1989	Tobias S , Hiriart M, Vega R, Drucker-Colin R: Cambios fenotipicos de celulas cromafines fetales transplantadas con glandula submaxilar de raton a la cabeza del nucleo caudado y ventriculo lateral respectivamente de la rata adulta. Rev Fac Med (unam) , (Abstract) suplemento, October, Mexico City.
1998	Tobias S and Simeone F: Cavernous malformations of thespinal cord. Contemporary Neurosurgery .
1998	Tobias S, Gomez-Llata S, Mateos JH. Malformaciones cavernosas: Analisis de la historia natural y tratamiento. Archivos de Neurociencias 3 (Spanish): $3-13$.
1998	Umansky F and Tobias S. Meningiomas of the anterior cranial fossa. EANS Course Book: $43-45$.
1999	Levy J, Edelman K, Weiss S, Eldar R, Tobias S. and Umansky F. Hearing preservation through BAEP during surgical resection of an intracannalicular Vestibular Schwannoma. Language and Hearing 21 (Hebrew): 61 - 64.
2001	Tobias S, Valarezo J, Meir K and Umansky F.: Giant Teratoma of the Cavernous Sinus: A Clinical Example of a Rare Entity. Case Report. Neurosurgery 48 : 1367-1371.
2002	Tobias S , Lee JH, Tomford JW.: Rare Actinobacillus Infection of the Cavernous Sinus Causing Painful Ophthalmoplegia: Neurosurgery 51 (3), 807-810.
2002	Tobias S, Pryson RA, Lee JH: Necrotizing Neurosarcoidosis of the Cranial Base Resembling an <i>en Plaque</i> Sphenoid Wing Meningioma: Case Report. Neurosurgery 51 :1290 – 1294.
2003	Tobias S, Kim CH, Kosmorsky G, Lee, JH: Management of surgical clinoidal meningiomas. Neurosurg Focus 1 (Article 5).
2003	Rosenthal G, Gomori JM, Tobias S , Diment J, Shoshan Y: Unusual cases involving the CNS and nasal sinuses: Case 1 Primary leptomeningeal melanoma. JCO 15 : 3875-3877.
2004	Yamashima T, Lee JH, Tobias S , Kim CH, Kwon JT, Chang JH: Simplified retrosigmoid approach for cerebello-pontine angle lesions. J Clinical Neuroscience 11 :168-171.

2006	Tobias S, Kim CH, Sade B, Staugaitis SM, Lee JH: Neuromuscular hamartoma
	of the trigeminal nerve in an adult. Case report. Acta Neurochir 48(1) : 83-87.
2006	Lee JH. Tobias S , Kwon JT, Sade B, Kosmorsky G: Wilbrand's kne: Does it exist? Surg Neurol 66 : 11-17.

Barhoum M, **Tobias S**, Elron M, Sharon A, Heija T, Soustiel JF. Syria civil war: Outcomes of humanitarian neurosurgical care provided to Syrian wounded refugees in Israel. **Brain Inj. 2015;29(11):1370-5.** doi: 10.3109/02699052.2015.1043346. Epub 2015 Jul 23. PMID: 26204320.

2021 Tobias S, Jahshan S, Grober Y, Soustiel JF. Skull base hemangiopericytomas. Acta Neurol Belg. 2021 Sep 30. doi: 10.1007/s13760-021-01812-0. Epub ahead of print. PMID: 34595730

BOOK CHAPTERS

1996 Verdura J, **Tobias S**: Granulomatous diseases of the Central Nervous System. In Youmans (Ed) *Neurological Surgery* 4th Ed. Saunders, Philadelphia: 3266 – 3269.

MEDICAL SOCIETIES

Israel Medical Association.

American Medical Association

Ohio State Medical Association

Active member Israel Neurosurgery Association

LANGUAGES

Speak: Spanish, English, Hebrew

Read: Spanish, English, Hebrew

Write: Spanish, English, Hebrew