July 2, 2018

CURRICULUM VITAE Heinrich Elinzano, MD

Division of Neuro-Oncology Department of Neurology, The Warren Alpert Medical School of Brown University Rhode Island Hospital 593 Eddy Street, APC 532 Providence, Rhode Island 02903 Telephone: (401) 444-7740 Fax: (401) 444-8366

EDUCATION

Undergraduate

Medical Education

Other Advanced Degrees

POSTGRADUATE TRAINING Residency

Fellowship

Bachelor of Science in Biology. University of the Philippines College of Science. Quezon City, Philippines. June 1983-April 1987

Doctor of Medicine. University of the Philippines College of Medicine. Manila, Philippines. June 1987-April 1991

Rotating Internship. Philippine General Hospital/University of the Philippines College of Medicine. Manila, Philippines. May 1991-April 1992

None

Internship in Internal Medicine. St. Barnabas Hospital/Weill Medical College of Cornell University. Bronx, New York. June 28, 1994-June 26, 1995

Residency Training in Neurology. St. Vincent's Hospital and Medical Center of New York City/New York Medical College. New York, New York. July 1, 1995-June 30, 1998. Chief Resident. July 1, 1997-June 30, 1998

Fellowship Training in Spinal Cord Injury Medicine. Barnes-Jewish Hospital/Washington University in St. Louis School of Medicine and The Rehabilitation Institute of St. Louis. St. Louis, Missouri. July 1, 2002-June 30, 2003

Fellowship Training in Neuro-Oncology. The Johns Hopkins University and The National Institutes of Health Combined Neuro-Oncology

Training Program. Baltimore and Bethesda, Maryland. July 1, 2003-June 30, 2005

POSTGRADUATE HONORS AND AWARDS

Dean's Excellence in Teaching Award. The Warren Alpert Medical School of Brown University. 2018

Dean's Excellence in Teaching Award. The Warren Alpert Medical School of Brown University. 2013

Outstanding Faculty Teacher Award. Department of Neurology. Rhode Island Hospital/The Warren Alpert Medical School of Brown University. 2012

Outstanding Intern. Philippine General Hospital/University of the Philippines College of Medicine. Manila, Philippines. 1992

MILITARY SERVICE

None

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Rhode Island Board of Licensure and Discipline (Active)

State Education Department of New York (Inactive Status)

American Board of Psychiatry and Neurology, Inc. Neurology

United Council for Neurologic Subspecialties. Neuro-Oncology

Faculty Staff. Division of Neuro-Oncology, Rhode Island Hospital. Associate Professor of Neurology, Clinician Educator; Associate Professor of Medicine, Clinician Educator. The Warren Alpert Medical School of Brown University. Providence, Rhode Island. April 1, 2010-Present

Associate Staff. Brain Tumor and Neuro-Oncology Center, Cleveland Clinic Neurological Institute. Cleveland, Ohio. April 17, 2006-June 2, 2008

ACADEMIC APPOINTMENTS

| | Clinical Fellow. Neuro-Oncology Branch, National Cancer Institute. Bethesda, Maryland. July 1, 2005-March 4, 2006 |
|-------------------------|---|
| | Staff Neurologist. Division of Neurology, Department of Medicine. Maimonides Medical Center. Brooklyn, New York. August 14, 1999- June 7, 2002 |
| | Lecturer. Clinical Neuroscience Lecture Series: AIDS Neurology. City University of New York Sophie Davies Biomedical School. Maimonides Medical Center. Brooklyn, New York. May 25, 2001 and June 7, 2002 |
| HOSPITAL APPOINTMENTS | Consultant Neurologist. Women & Infants Hospital. Providence, Rhode Island. April 2010- Present |
| | Locum Tenens Neurologist. St. John's Regional Medical Center. Joplin, Missouri. April 20-June 14, 2009; December 3-7 and 23-31, 2009; January 8-11, 2010 and January 22-31, 2010 |
| | Locum Tenens Neurologist. Veterans Affairs Medical and Regional Office Center. Togus, Maine. January 5-March 31, 1999 |
| OTHER APPOINTMENTS | National Cancer Institute. Registered Investigator |
| HOSPITAL COMMITTEES | Quality Monitoring and Improvement Committee. Quality Coordinator, Department of Neurology. Rhode Island Hospital/The Warren Alpert Medical School of Brown University. 2010-2014 |
| | Cancer Committee. Oncology Data Management Physician Reviewer. 2011-2013 |
| UNIVERSITY COMMITTEES | Chairman. Brown University Oncology Research Group Data Safety Monitoring Board. October 2012-Present |
| MEMBERSHIP IN SOCIETIES | American Society of Clinical Oncology. Member |

Society for Neuro-Oncology. Member

American Academy of Neurology. Associate Member

Rhode Island Neurological Society. Member

PUBLICATION LIST

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

Liau LM, Ashkan K, Tran DD, Campian JL, Trusheim JE, Cobbs CS, Heth JA, Salacz M, Taylor S, D'Andre SD, Iwamoto FM, Dropcho EJ, Moshel YA, Walter KA, Pillainayagam CP, Aiken R, Chaudhary R, Goldlust SA, Bota DA, Duic P, Grewal J, Elinzano H, Toms SA, Lillehei KO, Mikkelsen T, Walpert T, Abram SR, Brenner AJ, Brem S, Ewend MG, Khagi S, Portnow J, Kim LJ, Loudon WG, Thompson RC, Avigan DE, Fink KL, Geoffroy FJ, Lindhorst S, Lutzky J, Sloan AE, Schackert G, Krex D, Meisel HJ, Wu J, Davis RP, Duma C, Etame AB, Mathieu D, Kesari S, Piccioni D, Westphal M, Baskin DS, New PZ, Lacroix M, May SA, Pluard TJ, Tse V, Green RM, Villano JL, Pearlman M, Petrecca K, Schulder M, Taylor LP, Maida AE, Prins RM, Cloughesy TF, Mulholland P, Bosch ML: First results on survival from a large Phase 3 clinical trial of an autologous dendritic cell vaccine in newly diagnosed glioblastoma. J Transl Med. 2018 May 29;16(1):142

Elinzano H, Glantz M, Mrugala M, Kesari S, Piccione DE, Kim L, Pan E, Yunus S, Coyle T, Timothy K, Evans D, Mantripigada K, Boxerman J, DiPetrillo T, Donahue J, Hebda N, Mitchell Km, Rosati KL, Safran H: PPX and Concurrent Radiation for Newly Diagnosed Glioblastoma Without MGMT Methylation: A Randomized Phase II Study: BrUOG 244. Am J Clin Oncol. 2015 Dec 9. [Epub ahead of print]

Punsoni M, Donahue JE, Elinzano H, Kinsella T: Updates in molecular pathology of central nervous system gliomas in adults. RI Med J. 2015 Nov 2;98(11):17-9

Boxerman JL, Ellingson BM, Jeyapalan S, Elinzano H, Harris RJ, Rogg JM, Pope WB,

Safran H: Longitudinal DSC-MRI for distinguishing tumor recurrence from pseudoprogression in patients with a high-grade glioma. Am J Clin Oncol 2014 Nov 26. [Epub ahead of print]

Jeyapalan S, Boxerman J, Donahue J, Goldman M, Kinsella T, Dipetrillo T, Evans D, Elinzano H, Constantinou M, Stopa E, Puthawala J, Cielo D, Santaniello A, Oyelese A, Mantripagada K, Rosati K, Isdale D, Safran H: Paclitaxel poliglumex, temozolomide, and radiation for newly diagnosed high-grade glioma. A Brown University Oncology Group Study. Am J. Clin Oncol. 2013 Feb 5. [Epub ahead of print]

Marina O, Suh JH, Reddy CA, Barnett GH, Vogelbaum MA, Peereboom DM, Stevens GH, Elinzano H, Chao ST: Treatment outcomes for patients with glioblastoma multiforme and a low Karnofsky Performance Scale score on presentation to a tertiary care institution. J Neurosurg. 2011 May 6. [Epub ahead of print]

Scott JG, Suh JH, Elson P, Barnett GH, Vogelbaum MA, Peereboom DM, Stevens GH, Elinzano H, Chao ST: Aggressive treatment is appropriate for glioblastoma multiforme patients 70 years old or older: a retrospective review of 206 cases. Neuro Onc. 2011 Apr;13(4):428-36. Epub 2011 Mar 1

Kang T, Jin T, Elinzano H, Peereboom D: Irinotecan and bevacizumab in progressive primary brain tumors, an evaluation of efficacy and safety. J Neurooncol. 2008 Aug;89(1):113-8 Epub April 26

Sander HW, Quinto CM, Elinzano H, Chokroverty S: Carpet carrier's palsy: musculocutaneous neuropathy. Neurology. 1997 Jun;48:1731-1732

OTHER PEER-REVIEWED PUBLICATIONS

None

BOOK AND BOOK CHAPTERS

Elinzano H, Fine H. Antiangiogenic therapy in gliomas. In: Abbruzzese JL, Davis DW, Herbst RS Editors. Anti-Angiogenic Cancer Therapy. Taylor & Francis Group. 2007

Elinzano H, Laterra J. Epidural cord compression and leptomeningeal metastasis. In: Johnson RT, Griffin JW, McArthur JC Editors. Current Therapy in Neurologic Diseases. 7th Edition. Mosby, Inc. 2006

OTHER NON PEER-REVIEWED PUBLICATIONS

None

CORPORATE AUTHORSHIPS OR MULTICENTER TRIALS

LS-P-Wizard: A Randomized, Multicenter, Phase 2 Study of DSP-7888 Dosing Emulsion in Combination with Bevacizumab versus Bevacizumab Alone in Patients with Recurrent or Progressive Glioblastoma following Initial Therapy. Site Principal Investigator. Boston Biomedical Sumitomo Dainippon Pharma Global Oncology. 2018

BrUOG 329: Onivyde (nanoliposomal irinotecan) and Metronomic Temozolomide for Patients With Recurrent Glioblastoma: A Phase IB/IIA Brown University Oncology Research Group Study. NCT01856933. Principal Investigator/IND Holder. Ipsen Biopharmaceuticals, Inc. 2017

A071102: A Phase II/III Randomized Trial of Veliparib or Placebo in Combination with Adjuvant Temozolomide in Newly Diagnosed Glioblastoma with MGMT Promoter Hypermethylation. Site Principal Investigator. Alliance. 2015

LS-P-STEMLINE (STML-701-0114): A Phase 1/2 Study of SL-701, a Subcutaneously Injected Multivalent Glioma-Associated Antigen Vaccine, in Adult Patients with Recurrent Glioblastoma Multiforme. Site Principal Investigator. Stemline therapeutics Inc. 2015

BrUOG 623: PSMA ADC for Recurrent Glioblastoma (GBM): A Phase II Brown University Oncology Research Group Study. NCT01856933. Principal Investigator/IND Holder. Progenics Pharmaceuticals. 2014

LS-P-Celldex: A Phase II Study of Rindopepimut/GM-CSF in Patients with Relapsed EGFRvIII-Positive Glioblastoma. Site

Principal Investigator. Celldex Therapeutics, Inc. 2012

LS-P-DCVax: A Phase II Clinical Trial Evaluating DCVax®-Brain, Autologous Dendritic Cells Pulsed with Tumor Lysate Antigen for the Treatment of Glioblastoma Multiforme (GBM). Site Principal Investigator. Northwest Biotherapeutics. 2012

RTOG 0929: A Randomized Phase I/II Study of ABT-888 in Combination with Temozolomide in Recurrent (Temozolomide Resistant) Glioblastoma. Site Principal Investigator. Radiation Therapy Oncology Group and Brown University Oncology Group. 2011

BrUOG 244: PPX and Concurrent Radiation for Newly Diagnosed Glioblastoma Without MGMT Methylation: A Randomized Phase II Study. Co-Investigator. Brown University Oncology Group. 2011

RTOG 0913: Phase I/II Trial of Concurrent RAD001 (Everolimus) with Temozolomide/Radiation Followed by Adjuvant RAD001/Temozolomide in Newly Diagnosed Glioblastoma. Site Sub-Investigator. Radiation Therapy Oncology Group and Brown University Oncology Group. 2011

LS-P-Centric: Cilengitide for Subjects with Newly Diagnosed Glioblastoma Multiforme and Methylated MGMT Gene Promoter - A Multicenter, Open-Label, Controlled Phase III Study, Testing in Combination with Standard Treatment (Temozolomide with Concomitant Radiation Therapy, Followed by Temozolomide Maintenance Therapy) Versus Standard. Site Co-Investigator. Brown University Oncology Group. 2010

RTOG 0825: Phase III Double-Blind Placebo-Controlled Trial of Conventional Concurrent Chemoradiation and Adjuvant Temozolomide Plus Bevacizumab Versus Conventional Concurrent Chemoradiation and Adjuvant Temozolomide in Patients with Newly Diagnosed Glioblastoma. Site Sub-Investigator. Radiation Therapy Oncology Group and Brown University Oncology Group. 2010

BrUOG 223: A Phase II Study of PPX (CT-2103), Temozolomide and Concurrent Radiation for Newly Diagnosed Brain Tumors. Co-Investigator. Brown University Oncology Group. 2010

Phase II/III Randomized Study of CDX-110 with Radiation and Temozolomide in Patients with Newly Diagnosed Glioblastoma Multiforme Protocol CDX110-003. Site Co-Investigator. Brain Tumor and Neuro-Oncology Center. Cleveland Clinic Neurological Institute. 2008

A Safety Run-In/Randomized Phase II Trial of EMD 121974 (Cilengitide) in Conjunction with Radiation Therapy in Patients with Newly Diagnosed Glioblastoma Multiforme. Site Co-Investigator. Brain Tumor and Neuro-Oncology Center. Cleveland Clinic Neurological Institute. 2007

A Phase II Trial of Bevacizumab for Patients with Recurrent High-Grade Gliomas. Associate Investigator. Neuro-Oncology Branch. National Cancer Institute. 2005

A Phase I/II Trial of ZD6474 for Patients with Recurrent High-Grade and Progressive Low-Grade Gliomas. Associate Investigator. Neuro-Oncology Branch. National Cancer Institute. 2005

A Phase II Trial of LY317615 in Patients with Recurrent High-Grade Gliomas Protocol number: 03-c-0018K. Associate Investigator. Neuro-Oncology Branch. National Cancer Institute. 2004

PUBLICATIONS SUBMITTED OR IN PREPARATION

None

ABSTRACTS

Sarangi, S, Yaghi S, Elinzano H: Safety of Alteplase for Acute Ischemic Stroke in Patients with Intracranial Neoplasms: an Institutional Experience. Abstract P4 2018 AAN Annual Meeting. Apr 21 - 27, 2018

Elinzano H, Hebda N, Luppe D, Turchetti W, Rosati K, Sikov W, Safran H: PSMA ADC for Progressive Glioblastoma: Phase II Brown University Oncology Research Group Study. Abstract 2065 2016 ASCO Annual Meeting. June 4, 2016 J Clin Oncol 34, 2016 (suppl; abstr 2065)

Elinzano H, Kadivar F, Yadav PO, Breese VL, Jackson CL, Donohue JE, Boxerman JL: Analysis of perfusion and volumetric MRI in progressive glioblastoma patients treated with continuous dose-intense temozolomide. 0804 The 4th Quadrennial Meeting on the World Federation of Neuro-Oncology and 2013 Scientific Meeting and Education Day of the Society for Neuro-Oncology November 21-24, 2013 Neuro-Oncology 15:iii165–iii172, 2013

Donahue J, Mahboob M, Rogg J, Elinzano H: Astroblastoma with Malignant Degeneration Developing Twenty-Six Years After Radiation Therapy for Low-Grade Glioma. 101 American Association of Neuropathologists, Inc. Abstracts from the 89th Annual Meeting June 20-23, 2013. J Neuropathol Exp Neurol 72(6):540-598

Robbins HI, Wang M, Gilbert MR, Chakravarti A, Grimm S, Penas-Prado M, Chaudhary R, Anderson P, Elinzano H, Gilbert RA, Mehta M: Phase I Results from RTOG 0929, A Randomized Phase I/II Study of ABT-888 (Veliparib) in Combination with temozolomide (TMZ) in Recurrent, TMZ-Resistant Glioblastoma. NO-14 Abstracts from the 17th Annual Meeting of the Society for Neuro-Oncology (SNO) November 15-18, 2012. Neuro-Oncol 14 (Supplement 6), 2012:vi67

Blitstein M, Boxerman, JL, Rogg JM, Elinzano H, Jeyapalan S, Goldman M, Dargush M, Santaniello A, Dipetrillo T, Safran H: Role of longitudinal perfusion-weighted MR imaging measures in distinguishing tumor recurrence from pseudoprogression in a cohort of patients with high-grade gliomas receiving radiation therapy and paclitaxel poliglumex. Paper 539 ASNR 49th Annual Meeting June 4-9, 2011

Jeyapalan SA, Goldman M, Donahue J, Elinzano H, Evans DL, O'Connor BM, Puthawala MA,

Oyelese A, Cielo D, Blitstein M, Dargush M, Santaniello A, Constantinou M, Dipetrillo, Safran H, and Brown Oncology Group: A phase II study of paclitaxel poliglumex (PPX), temozolomide (TMZ), and radiation (RT) for newly diagnosed high-grade gliomas. J Clin Oncol 2011 ASCO Annual Meeting Proceedings: 29, No 15_suppl (May 20 Supplement), 2011:2036

Jeyapalan S, Constantinou M, Evans D, Elinzano H, O'Connor B, Puthawala MY, Goldman M, Oyelese A, Cielo D, Dipetrillo T, Safran H: Paclitaxel poliglumex (PPX), Temodar (TMZ), and radiation therapy (RT) for newly diagnosed high-grade gliomas: a Brown University Oncology Group phase II study. Abstracts from the 15th Annual Meeting of the Society for Neuro-Oncology (SNO) November 18-21, 2010. Neuro-Oncol 2010 Nov

Kreisl T, Kim L, Elinzano H, Royce C, Stroud I, Garren N, Albert P, Musib L, Thornton DE, Fine H: A phase I trial of enzastaurin (LY317615) in patients with recurrent gliomas. Abstracts for the Thirteenth Annual Meeting of the Society for Neuro-Oncology November 20-23, 2008. Neuro-Oncol 2008 Oct:28 Advance Publication August 26

Fine HA, Kim L, Royce C, Draper D, Haggarty I, Elinzano H, Kinney AP, Musib L, Thornton D: Results from phase II trial of enzastaurin (LY317615) in patients with recurrent high grade gliomas. J Clin Oncol 2005 ASCO Annual Meeting Proceedings: 23(16S):1504

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

PEER-REVIEWED

None

NON PEER-REVIEWED

None

INVITED PRESENTATIONS

Nervous System Metastasis. Neuro-Oncology Symposium, Philippine General Hospital. December 21, 2017, Manila, Philippines

The Neurologic Examination. Memorial Hospital of Rhode Island. November 16, 2017, Pawtucket, Rhode Island

Brain Metastasis. Lifespan 11th Annual Oncology Nursing Education Day, October 28, 2017, Newport, Rhode Island

Glioblastoma. Roger Williams Medical Center. October 17, 2017, Providence, Rhode Island

Diffuse Low Grade Gliomas. Neurosurgery Grand Rounds, Rhode Island Hospital. December 14, 2015, Providence, Rhode Island

Brain Cancer: Glioblastoma. Newport Hospital. May 2, 2014, Newport, Rhode Island

Cognitive Impairment in Cancer Patients and Cancer Survivors. Cancer Survivorship: Transition to Health and Well-Being Symposium. September 18, 2013, Providence, Rhode Island

Angiogenesis in Glioblastoma. Special Seminar, Department of Neurology. Mount Sinai Hospital and School of Medicine. April 25, 2013, New York, New York

Current Treatment of Glioblastoma. Lifespan's 6th Annual Oncology Nursing Education Day. November 3, 2012, Seekonk, Massachusetts

Recurrent Glioblastoma. Progenics Pharmaceuticals. May 1, 2012, Tarrytown, New York

Rhode Island Hospital Brain Tumor Registry. American Cancer Society and The Partnership to Reduce Cancer in Rhode Island Quarterly Partnership Meeting. April 26, 2011, Warwick, Rhode Island

Metastatic Epidural Spinal Cord Compression. Washington University in St. Louis School of Medicine and The Rehabilitation Institute of St. Louis. March 16, 2011, St. Louis, Missouri

Biomarkers in Glioblastoma. Neurology Grand Rounds, Rhode Island Hospital. September 22, 2010, Providence, Rhode Island

| | Survival in Patients with Brain Tumor. Volunteers Meeting, SSM Hospice, SSM Health Care. March 12 & 23, 2009, St. Louis, Missouri |
|---------------------------|---|
| | Paraneoplastic Syndromes. Neuro-Oncology 2007: Current Concepts, Cleveland Clinic Neurological Institute and the Taussig Cancer Center. March 10, 2007, Oahu, Hawaii |
| | Diagnosis: Finding the Tumor. Brain Tumors: Confronting the Challenge Together, Cleveland Clinic and the Brain Tumor Society. September 9, 2006, Cleveland, Ohio |
| | Imaging Angiogenesis in Gliomas: The Emerging Role of Dynamic Contrast-Enhanced Magnetic Resonance Imaging (DCE-MRI). Brain Tumor Institute, Cleveland Clinic Taussig Cancer Center. September 12, 2005, Cleveland, Ohio |
| <u>GRANTS</u> | None |
| | None |
| UNIVERSITY TEACHING ROLES | Co-Director, Brain Cancer Committee, Brown University Oncology Research Group |
| | Longitudinal Ambulatory Clerkship Faculty Course Leader |
| | Doctoring Faculty Mentor |
| | Small Group Session Faculty Leader |
| | Clinical Clerkship Neurology/Neuro-Oncology Elective Faculty Preceptor |
| | Medical Student Research Neuro-Oncology Faculty Advisor |
| HOSPITAL TEACHING ROLES | Neuro-Oncology Medical Lead, Lifespan Cancer Institute |
| | Ward and Consult Service Neurology Attending |
| | Morning Report, Case Presentation, Journal Club and Book Review Neurology Attending |

Ward and Consult Service Neuro-Oncology Attending

Neurology Resident and Hematology/Oncology Fellow Neuro-Oncology Elective Attending

Multidisciplinary Brain Tumor Conference Neuro-Oncology Faculty

Neuro-Oncology Conference Faculty Lecturer