With the incidence of primary brain cancer increasing across the nation, Spectrum Health’s comprehensive Brain & Spine Tumor Center improves the quality and efficiency of care available in West Michigan and allows patients to remain closer to home, family and community support systems.

We offer highly specialized, interdisciplinary care for adult patients diagnosed with primary and metastatic tumors of the brain and spine.

Our team provides the most advanced and innovative treatment options, including new, emerging and experimental therapies, using a coordinated, expedited and patient-centric care model.
Brain & Spine Tumor Center Team
Spectrum Health Medical Group

Christie Adams, PA-C
Postgraduate Education: Philadelphia University

Kaveh Asadi, MD, PhD
Medical Education: Julius-Maximilans-University, Wuerzburg, Germany
Residency: Ohio State University, Wexner Medical Center
Fellowship: Pediatric Neurosurgery, Cincinnati Children's Hospital

Hayden M. K. Boyce, MD
Medical Education: New York University School of Medicine
Residency: Henry Ford Health System
Board Certification: Neurosurgery

Kost Elisevich, MD, PhD
Co-Chair, Department of Clinical Neurosciences
Chief, Division of Neurosurgery
Medical and Doctoral Education: University of Western Ontario, Canada
Residency: McGill University Health Centre, Montreal Neurological Institute and Hospital, Montreal Children's Hospital
Board Certification: Neurosurgery

Marilyn Gates, MD
Director, Spine & Pain Management Center
Medical Education: University of Vermont College of Medicine
Residency: University of Vermont, Fletcher Allen Health Care
Fellowship: Complex Spine, Medical College of Wisconsin
Board Certification: Neurosurgery

Sandra Gray, RN, BSN
Neuro-oncology Nurse Navigator
Clinical Education: Grand Valley State University

Michael Lawrence, PhD, ABPP-CN
Doctoral Education: University of Oklahoma Health Science Center
Fellowship: Neuropsychology, Geisinger Medical Center

Sanjay Patra, MD, MSc
Postgraduate Education: University of Toronto
Medical Education: Loma Linda University School of Medicine
Residency: Henry Ford Health System

Jessica Patten, LLMSW
Medical Social Worker
Postgraduate Education: Western Michigan University

Nathan Pomeroy, MD
Medical Education: University of Michigan
Residency: University of Michigan Hospitals and Health Center
Fellowship: University of Michigan
Board Certification: Internal Medicine
Subspecialty Certificate: Endocrinology, Diabetes and Metabolism

Wendy Sherman, MD
Co-director, Brain & Spine Tumor Center
Medical Education: Northwestern University, Feinberg School of Medicine
Residency: Northwestern University
Fellowship: Neuro-oncology, Northwestern University
Board Certifications: Neurology, Neuro-Oncology

Jason Squires, DO
Medical Education: Michigan State University College of Osteopathic Medicine
Residency: Michigan State University, Genesys Regional Medical Center
Fellowship: Spinal Surgery, University of Rochester
Board Certification: Orthopaedic Surgery

Kiran Taylor, MD
Chief, Psychiatry and Behavioral Medicine
Medical Education: University of Michigan
Residency: University of Michigan Hospitals and Health Center
Board Certification: Psychiatry

Todd W. Vitaz, MD
Director, Neurosurgical Oncology
Co-director, Brain & Spine Tumor Center
Medical Education: University of Cincinnati
Residency: University of Louisville Hospital
Fellowship: Neurosurgical Oncology, Memorial Sloan-Kettering Cancer Center
Board Certification: Neurosurgery
Neuro-Oncology Tumor Board
Experts from multiple specialties meet to review and evaluate each patient case in order to determine an accurate diagnosis and optimal patient-specific treatment recommendation.

Brain and Spine Tumor Clinic
In one visit to a single location, your patient and his or her family meet with an interdisciplinary team of specialists to review and discuss treatment and support options. Your patient leaves this appointment with a detailed treatment plan and understanding of “next steps.”

Pituitary Tumor Clinic
A multidisciplinary clinic designed specifically for patients with pituitary tumors and other pituitary abnormalities. Your patient meets with our endocrinologist, neuro oncologist and skull base neurosurgeon, all in the same appointment, to discuss a care and treatment plan.

Nurse Navigation
A dedicated neuro-oncology nurse navigator coordinates care and services, provides education and support, and guides your patient and his or her family through the entire treatment process and beyond.

Behavioral Oncology/Supportive Care Medicine
Screening, support, counseling and behavioral medication management services are integrated into your patient’s treatment plan to help minimize the impact of emotional, psychological and psychosocial distress that can accompany a brain tumor diagnosis.

Advanced Techniques and Technologies

**Imaging**
- 3Tesla MRI
- Functional MRI (fMRI)
- MRI spectroscopy (MRspect)
- 3-D neuroimaging (NeuroQuant®)

**Surgery**
- Awake craniotomy with brain mapping for eloquent area tumors
- Intraoperative neurophysiological monitoring
- Intraoperative MRI (iMRI)
- Laser thermocoagulation
- Microsurgical techniques
- MRI-guided laser technology (Visualase)
- Neuroendoscopy for skull base tumors
- Spinal reconstruction for destructive tumors
- Surgical imaging system (O-Arm®)
- Surgical navigation system (StealthStation®)

**Radiation therapy**
- Image guided radiation therapy (IGRT)
- Intensity modulated radiation therapy (IMRT)
- Stereotactic body radiation therapy (SBRT)
- Stereotactic radiosurgery system (Novalis Tx™)

**Chemotherapy** (see Neuro-Oncology, next page)

**Tumor Treating Fields (TTF) therapy**
Latest Neuro-Oncology Protocols
We use emerging techniques and dosing strategies that optimize both overall survival and quality of life. These include:
• Systemic delivery of targeted molecular agents
• Localized delivery of therapies using surgically implanted chemotherapy
• Genetic tumor analysis
• Enrollment in experimental protocols, including targeted agents, combination regimens, and immunologic agents

Comprehensive Support Services
A wide range of cancer support services is available through Lemmen Holton Cancer Pavilion. These include nutritional counseling, alternative medicine modalities like acupuncture, rehabilitation and recovery programs, classes and support groups, a resource library, hospice and palliative care, pastoral and spiritual care, and much more.

Research and Clinical Trials
Access to local, investigator-initiated and national, multicenter clinical trials and research studies is available through our membership with Grand Rapids Clinical Oncology Program. We also will be conducting our own protocols and have established a tumor tissue bank to enable research and analysis of outcomes data.

Timely Access and Communication
You may refer a patient directly to the Brain & Spine Tumor Center. After his or her initial visit, we will provide you with a written copy of the recommended treatment and care plan. You will also receive copies of all clinic and hospital test results.

Brain & Spine Tumor Center highlights:
• Leadership by board-certified, fellowship-trained experts in central nervous system tumors, including brain metastases and neurological complications of systemic cancer, such as migraines, seizures and neuropathy
• Interdisciplinary team approach with many specialties working together to determine optimal treatment and care plans
• Dedicated neuro-oncology nurse navigator to coordinate care and services for each patient and his or her family or caregivers
• Comprehensive treatment and support services customized to patient’s individual needs and focused on survival with optimal quality of life
• Advanced imaging, surgical and radiation therapy options, including the region’s only high-field intraoperative magnetic resonance imaging (iMRI) for the most complete tumor removal possible
• Access to clinical trials, included national cooperative trials
• Partnership with referring physician for initial diagnosis, entire case management or second opinion consultation