Ian's Friends Foundation (IFF) Brain Tumor Biorepository at Children's Health Care of Atlanta (CHOA) has been established to collect, culture, and distribute pediatric brain tumor biospecimen for research studies with CHOA IRB approval and patient consent. The goal of IFF is to make these biospecimen available free of charge except for shipping to research investigators working on advancing the molecular understanding and treatment of pediatric brain tumors. Currently the IFF Brain Tumor Biorepository at CHOA has several pediatric brain tumor neurosphere cultures available.

These cultures have been quality control tested and found free of mycoplasma, bacteria and fungi contamination. Phenotypic verification has been done by H&E evaluation and currently short tandem repeat cell line authentication matching the cell cultures to the original tumor is being done.

3 GBM, 1 DIPG, and 1MB which has corresponding culture from circulating tumor cells

Tumors with cells that grow well	Tumor type	Selected genomic alterations of original tumor	Neurospheres passed Quality Control
IFF-BT52	Metastatic Medulloblastoma	Large cell/ Anaplastic, Group 3	Neurosphere cultured 90 days with 4 passages (8 vials)
IFF-BT52-CTC	Circulating Tumor Cells (CTC)- Metastatic Medulloblastoma	Large cell/ Anaplastic, Group 3	Neurosphere cultured 41 days with 3 passages (15 vials) and 49 days with 3 passages (13 vials)
IFF-BT59	Anaplastic Astrocytoma/DIPG	Diffuse Midline glioma, H3, K27M mutant	Neurosphere cultured 121 days with 4 passages (4 vials)
IFF-BT68	Radiation Induced Glioblastoma	unknown-from autopsy	Neurosphere cultured 35 days with 3 passages (10 vials)
IFF-BT76	Glioblastoma	Diffuse Midline Glioma, H3, K27M mutant	Neurosphere 27 day in culture with 2 passages (8 vials) and 38 days with 3 passages (10 vials)
IFF-BT85	Glioblastoma	MET-PTPRZ1 Fusion, Homozygous deletion CDKN2A, p53 mutant	Neurosphere cultured 56 day with 2 passages (4 vials)

Also available are viable brain tumor tissue and early growth neurospheres which have not gone through quality control and which have not proliferated or thrived after passaging in our lab but may be of use for xenograft, cell sorting, or other research.

Tumors with cells that grew and then stopped	Tumor type	Selected genomic alterations of original tumor	What is available (cells after passage or original cells)	How many passages occurred before blunted growth
IFF-BT42	Medulloblastoma	SHH group, WHO grade IV	Neurosphere 6 day in culture, no passage (3 vials); and tissue for culturing (1 vial)	1 passage
IFF-BT53	recurrent Medulloblastoma	Large Cell/Anaplastic, SHH group, p53 loss, MYCN amplification	Neurosphere 16 day in culture, no passage (2 vials)	1 passage
IFF-BT61	Medulloblastoma	Classic, Group 3	Neurosphere 13 day in culture, no passage (2 vials); and tissue for culturing (1 vial)	1 passage
IFF-BT63 (2)	Medulloblastoma	SHH group, TP53 mutant, WHO grade IV	Tissue for culturing (1 vial)	1 passage
IFF-BT66	Medulloblastoma	SHH group, wild-type p53, WHO grade IV	Tissue for culturing (1 vial)	1 passage
IFF-BT71	Glioblastoma	MGMT promoter methylation not detected, ATRX neg, p53 positive, WHO grade IV	Uncultured cells (3 vials); Neurosphere 14 days in culture, 1 passage (3 vials) QC passed; and tissue for culturing (1 vial)	2 passages
IFF-BT54 (2)	Radiation Induced Glioblastoma	Complex Karotype, WHO grade IV; recurrent	Neurosphere 56 day in culture, 3 passages (2 vials); neurospheres 28 days in culture, 1 passage (3 vials); and tissue for culturing (2 vials)	3 passages
IFF-BT82	Medulloblastoma	Classic, group 3 or 4, WHO grade IV	Neurosphere 5 day in culture, no passage (3 vials); early culture no QC	2 passages; may not be used for mouse studies
IFF-BT82	Medulloblastoma	Classic, group 3 or 4, WHO grade IV	Neurosphere 20 day in culture with 2 passages (3 vials); QC passed	2 passages; may not be used for mouse studies

To obtain a “Statement of Research Intent” Form to submit a request,

Contact

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