

APPLICATION FOR USE OF BANKED BIOSPECIMENS

Investigators continue to need reliable biospecimen collections with linked clinical, treatment, and outcome data crucial for advancing cancer research, validating and bringing biomarkers and tests from the bench to bedside, and enabling personalized medicine in the future. The purpose of the Children’s Oncology Group (COG) biospecimen bank located at the Biopathology Center (BPC)/Nationwide Children’s Hospital in Columbus, OH is to support integrated and integral biomarker studies conducted by the COG, and to maintain a publicly available supply of biospecimens to support research conducted by the childhood cancer research community.

**INSTRUCTIONS**

The Principal Investigator (PI) responsible for overseeing the project, laboratory and personnel who will receive, use, and process the requested biospecimens should complete this application. Each section of this application must be fully completed. The information in these forms is necessary in order to accurately document your request for tissue and other services and to ensure that the COG and the BPC operate within the guidelines of the National Cancer Institute (NCI). When submitting a request for services, note the following:

1. **Application Completion Instructions**
	1. Type directly into this electronic form.
	2. Complete the accompanying **Proposal for use of NCTN Clinical Trial Biospecimens Form**
	3. If requesting biospecimens from more than one specific anatomic site or disease, please complete separate copies of the [Biospecimen Request Form](#_BIOSPECIMEN_REQUEST_FORM) as necessary (biospecimen type and preparation details).
	4. Patient identity is confidential. Samples and accompanying clinical data will be identified by a unique code and patient-identifying information will not be released under any circumstances.
	5. Completed requests for banked biospecimens and accompanying documents should be emailed to the COG at specimens@childrensoncologygroup.org. Only electronic submissions will be accepted.
2. **Supporting Documentation**

*The following forms are required to be submitted along with this application*

* 1. A current copy of your NIH biosketch must also **accompany this application**.
	2. PIs must obtain human subjects review from their institution in order to receive biospecimens from the COG/BPC. Full or expedited approval or an exemption for your project can be obtained from your Institutional Review Board (IRB) (Human Use Committee). **A COPY OF THE HUMAN SUBJECTS APPROVAL OR REVIEW DOCUMENTATION SHOULD BE RETURNED WITH THIS FORM**. Documentation of annual review of non-exempt protocols by the PI’s institution must be forwarded to the BPC in order to maintain eligibility to receive biospecimens. This is not necessary for exempt protocols.

**Contracts and Agreements**

*The following agreements must be fully executed prior to biospecimen distribution*

* 1. A Materials Transfer Agreement (MTA) with the COG is required for all approved projects. A copy of this form will be sent upon approval.
	2. An Agreement For Use of Tissue and Data Use Agreement between the investigator and the Biopathology Center (BPC)/Collaborative (formerly Cooperative) Human Tissue Network (CHTN) is also required prior to biospecimen distribution. The Pediatric Division of the CHTN at the BPC serves as the biospecimen distribution mechanism for the COG.
	3. A Data Use Agreement (DUA) with the COG is required prior to release of annotated clinical data (if requested). See the [Additional Biospecimen Information Required](#_Additional_Biospecimen_Information) section of this application for further guidance on when a DUA is needed.
1. **Review process**

*Contact* *specimens@childrensoncologygroup.org* *for questions regarding the application review process*

* 1. All requests for COG biospecimens require review and approval by the respective COG Disease Committee(s) and the NCI Cancer Therapy Evaluation Program (CTEP) or National Clinical Trials Network (NCTN) Navigator, Core Correlative Science Committees (CCSC).
	2. Requests for specimens from ≥ 50 patient cases in total, specimens from ≥ 50% of patient cases from a single trial arm, or for certain rare or difficult to attain biospecimens may also require COG Scientific Council review and approval.
	3. PIs of studies approved by the COG are required to submit brief, annual progress reports to the respective COG disease committee. Any publication of the study should be sent to the respective COG disease committee chair with a copy to specimens@childrensoncologygroup.org, for their information, with appropriate acknowledgements (refer to the COG MTA).
1. **Fees**
	1. The PI is responsible for remission of processing fees to the BPC, including fees for any additional services performed and any shipping costs not directly billed to the applicant’s courier account. Please contact The Biopathology Center at BPCDist@nationwidechildrens.org for the current fee structure.
	2. A fee for statistical effort in generating biospecimen-associated data-sets and data analyses may apply.

**COLLABORATING PERSONNEL/LABORATORIES**

Any transfer of samples, aliquots, derivatives or associated clinical data to collaborating personnel or laboratories outside of your home institution that are not under the direct supervision of the indicated PI requires the following:

* A written justification of the need to transfer the materials and benefit to the applicant’s proposed research.
* Copy of the COG Materials Transfer Agreement (MTA) signed by the collaborator.
* Copy of Agreement For Use of Tissue and Data Use Agreement between the investigator and the BPC/ CHTN.
* Documentation of the collaborator’s current IRB approval or exemption unless the collaborator is covered under the IRB approval granted for the project proposed in this application.

This applies to pay-for-service labs that may be used for your project.

**DISTRIBUTION TO THIRD-PARTY RESEARCHERS**

**The COG and BPC do not supply samples to biospecimen banks whose purpose is distribution to third-party researchers. Transfer of biospecimens to another biospecimen bank is strictly prohibited.**

**Children’s Oncology Group Statement of Confidentiality**

The Children's Oncology Group has received a Certificate of Confidentiality from the federal government, which will help us protect the privacy of our research subjects. The Certificate protects against the involuntary release of information about subjects collected during the course of our covered studies. The researchers involved in the studies cannot be forced to disclose the identity or any information collected in the study in any legal proceedings at the federal, state, or local level, regardless of whether they are criminal, administrative, or legislative proceedings. However, the subject or the researcher may choose to voluntarily disclose the protected information under certain circumstances. For example, if the subject or his/her guardian requests the release of information in writing, the Certificate does not protect against that voluntary disclosure. Furthermore, federal agencies may review our records under limited circumstances, such as a DHHS request for information for an audit or program evaluation or an FDA request under the Food, Drug and Cosmetics Act. The Certificate of Confidentiality will not protect against the required reporting by hospital staff of information on suspected child abuse, reportable communicable diseases, and/or possible threat of harm to self or others.

# ADMINISTRATIVE INFORMATION

|  |  |
| --- | --- |
|  | **This box for COG/BPC use only.****Study Number:** Click here to enter text.*(To be assigned by COG)* |
| **PRINCIPAL INVESTIGATOR INFORMATION** |
|  | Date Submitted: Click here to enter a date. |
|  | First Name: Click here to enter text. | Middle Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Degree: Click here to enter text. | Title: Click here to enter text. |
|  | Institution Type: [ ]  Academic/Government [ ]  Commercial [ ]  Non-Profit |
|  | **Mailing Address** |
|  | Institution: Click here to enter text. |
|  | Department: Click here to enter text. |
|  | Address 1: Click here to enter text. |
|  | Address 2: Click here to enter text. |
|  | City: Click here to enter text. | State: Click here to enter text. | Zip Code: Click here to enter text. |
|  | Country: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt Tel#: Click here to enter text. | Fax#: Click here to enter text. |
|  |  |
| **CO-PRINCIPAL INVESTIGATOR INFORMATION** |
|  | *Note: Only those investigators who have had/will have substantive input into the design, development, and/or conduct of your proposed study should be listed below.* |
|  | **Co-Principal Investigator 1** |
|  | First Name: Click here to enter text. | Middle Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Degree: Click here to enter text. | Title: Click here to enter text. |
|  | Institution Type: [ ]  Academic/Government [ ]  Commercial [ ]  Non-Profit |
|  |  |
|  | **Mailing Address** |
|  | Institution: Click here to enter text. |
|  | Department: Click here to enter text. |
|  | Address 1: Click here to enter text. |
|  | Address 2: Click here to enter text. |
|  | City: Click here to enter text. | State: Click here to enter text. | Zip Code: Click here to enter text. |
|  | Country: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt Tel#: Click here to enter text. | Fax#: Click here to enter text. |
|  |  |
|  | **Co-Principal Investigator 2** |
|  | First Name: Click here to enter text. | Middle Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Degree: Click here to enter text. | Title: Click here to enter text. |
|  | Institution Type: [ ]  Academic/Government [ ]  Commercial [ ]  Non-Profit |
|  |  |
|  | **Mailing Address** |
|  | Institution: Click here to enter text. |
|  | Department: Click here to enter text. |
|  | Address 1: Click here to enter text. |
|  | Address 2: Click here to enter text. |
|  | City: Click here to enter text. | State: Click here to enter text. | Zip Code: Click here to enter text. |
|  | Country: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt Tel#: Click here to enter text. | Fax#: Click here to enter text. |
|  |  |
| **LABORATORY CONTACT INFORMATION** |
|  | First Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Title: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt Tel#: Click here to enter text. |
|  |  |
|  | First Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Title: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt Tel#: Click here to enter text. |
|  |  |
| **BIOSPECIMEN SHIPPING INFORMATION** |
|  | Shipping Courier: Click here to enter text. | Account# (required)\*: Click here to enter text. |
|  | Shipping address same as mailing address: [ ]  |
|  | Attention: Click here to enter text. |
|  | Institution: Click here to enter text. |
|  | Department: Click here to enter text. |
|  | Address 1: Click here to enter text. |
|  | Address 2: Click here to enter text. |
|  | City: Click here to enter text. | State: Click here to enter text. | Zip Code: Click here to enter text. |
|  | Country: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt#: Click here to enter text. |
|  | **\*Shipping costs will be included on the invoice if courier is not provided.** |
|  |  |
| **BILLING AND PAYMENT INFORMATION** |
|  | Billing Contact First Name: Click here to enter text. | Last Name: Click here to enter text. |
|  | Title: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: Click here to enter text. | Alt#: Click here to enter text. |
|  | Billing Address: Click here to enter text. |
|  | Billing address same as mailing address: [ ]  |
|  | Attention: Click here to enter text. |
|  | Institution: Click here to enter text. |
|  | Address 1: Click here to enter text. |
|  | Address 2: Click here to enter text. |
|  | City: Click here to enter text. | State: Click here to enter text. | Zip Code: Click here to enter text. |
|  | Country: Click here to enter text. | Email: Click here to enter text. |
|  | Tel#: | Alt #: | Fax #: |
|  |  |
|  | Payment Details: |
|  | Purchase Order (PO): [ ]  | Credit Card: [ ]  Please call 614-355-2802 for payment |
|  | PO #: Click here to enter text. | PO Expiration Date: Click here to enter a date. | PO Amount: Click here to enter text. |
|  | Bill to grant: Click here to enter text. | Billing reference #: Click here to enter text. |

**IRB and Funding Information:**

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| --- |
| **IRB Review Type:** *IRB documentation required to show IRB review decision* |
|  [ ]  Full |  [ ]  Expedited |  [ ]  Exempt |
|  [ ]  Human Use Agreement |  [ ]  Not Human Subjects Research |
| IRB #: Click here to enter text. | IRB Expiration Date: Click here to enter a date. | No Expiration: [ ]  |
|  |
| **Funding Information** |
| Tissues will be provided to investigators on a rotating basis in the following priority order:1. Integrated/Internal studies for COG approved protocols
2. COG approved biology studies
3. Non-protocol investigators, NIH peer reviewed funding
4. Non-protocol investigators, nationally peer reviewed non-federal funding
5. Non-protocol investigators, other funding
6. Industry investigators, commercial

To help define the priority of your request, please include your major research grant. Institutional and other funding sources may also be listed. |
| **Currently unfunded:** [ ]  |
|  Please explain: Click here to enter text. |
|  |
| **Funding Source #1**: Click here to enter text. |
|  Grant/Cooperative Agreement #: Click here to enter text. |
|  Grant Start Date: Click here to enter text. | Grant End Date: Click here to enter text. |
|  |
| **Funding Source #2**: Click here to enter text. |
|  Grant/Cooperative Agreement #: Click here to enter text. |
|  Grant Start Date: Click here to enter text. | Grant End Date: Click here to enter text. |
|  |
| **Additional Funding Questions** |
| Is this study funded by a NIH contract?  |  [ ]  Yes | [ ]  No |  [ ]  Pending |
|  If yes, specify source: Click here to enter text. |
|  |
| If non-NCI/non-NIH funding source (i.e. institutional funds, industry, ACS), specify source: Click here |
|  |
| Are you under a grant deadline for receiving a decision from COG? [ ]  Yes [ ]  No |

# BIOSPECIMEN REQUEST FORM

***If requesting biospecimens from more than one specific anatomic site or disease, please complete separate copies of this form.*** *Please be as specific as necessary about your requirements, including those for storing and handling samples from the time the biospecimens are collected until they are delivered. This is a standard COG/BPC application for biospecimens and not all sections pertain to all disease categories. For questions, correspond with the chair of the disease committee.*

|  |
| --- |
| **SOLID MALIGNANCY REQUEST** |
| **Frozen Tissue** [ ]  |
| **Diagnosis:** Click here to enter text. | **Anatomic site:** Click here to enter text. |
| **Timepoint:** | [ ]  Diagnostic/Pre-Treatment | [ ]  Relapse | [ ]  Other, specify: Click here to enter text. |
| **Frozen Tissue Details:** |
| **Tissue Type:** | [ ]  Primary | [ ]  Metastatic | [ ]  Normal |
| **Preparation Type:** | [ ]  Snap Frozen: # requested Click here to enter text. grams |
| [ ]  OCT Embedded: # requested Click here to enter text. @ Click here to enter text. grams  |
|  | [ ]  OCT scrolls: # requested Click here to enter text. @ Click here to enter text. microns  |
| **Biospecimen Size:** | Minimum weight: Click here to enter text. g | Maximum weight: Click here to enter text. g |
| **Tissue Quality Control:**  | Percent tumor cutoff: Click here to enter text. % Percent tumor necrosis cutoff: Click here to enter text. % |
| **Frozen Sections Details:** If interested in receiving the Quality Assurance H&E image, please remember to select H&E image box below. |
| **Tissue Type:** | [ ]  Primary | [ ]  Metastatic | [ ]  Normal |
| **Preparation Type:** | [ ]  H&E Image: | Image magnification: [ ]  20 X [ ]  40 X |
| [ ]  Unstained slide: | # requested Click here to enter text. slides  |
|  | *\*Applicable to newly cut material only\** |
|  | Preferred thickness: Click here to enter text. microns |
|  | Preferred slide type*:* [ ]  Charged slide [ ]  Uncharged slide |
|  | Preferred drying method*:* [ ]  Air dried [ ]  Heated |
| **Tissue Quality Control:**  | Percent tumor cutoff: Click here to enter text. % Percent tumor necrosis cutoff: Click here to enter text. % |
| **Formalin Fixed Paraffin Embedded Tissue** [ ]  |
| **Diagnosis:** Click here to enter text. | **Anatomic site:** Click here to enter text. |
| **Timepoint:** | [ ]  Diagnostic/Pre-Treatment | [ ]  Relapse | [ ]  Other, specify: Click here to enter text. |
| **Paraffin Tissue Details:** If interested in receiving the Quality Assurance H&E image, please remember to select H&E image box below. |
| **Tissue Type:** | [ ]  Primary | [ ]  Metastatic | [ ]  Normal |
| **Preparation Type:** | [ ]  H&E Image: | Image magnification: [ ]  20 X [ ]  40 X |
| [ ]  Unstained slide: | # requested Click here to enter text. slides  |
|  | [ ]  Scroll/Ribbon: | # requested Click here to enter text. @ Click here to enter text. microns  |
|  | *\*Applicable to newly cut material only\** |  |
|  | Preferred thickness:  | Click here to enter text. microns |
|  | Preferred slide type*:*  | [ ]  Charged slide  | [ ]  Uncharged slide |
|  | Preferred drying method: | [ ]  Air Dried  | [ ]  Heated |
| **Tissue Quality Control:**  | Percent tumor cutoff: Click here to enter text. % Percent tumor necrosis cutoff: Click here to enter text.% |

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| **Frozen Body Fluid** [ ]  |
| **Diagnosis:** Click here to enter text. |
| **Timepoint:** [ ]  Diagnostic/Pre-Treatment [ ]  Relapse [ ]  Other, specify: Click here to enter text. |
| **Frozen Fluid Details** |
| **Body fluid type:** Click here to enter text. | Minimum amount: Click here to enter text. mL |
| **White blood cells (if available)** [ ]  | Minimum cell count: Click here to enter text. |
| Percent viability: Click here to enter text. % |
| **Thaw and re-aliquoting acceptable (if necessary):** | [ ]  Yes | [ ]  No |
| **Nucleic Acids** [ ]  |
| **Diagnosis:** Click here to enter text. |
| **Timepoint:** [ ]  Diagnostic/Pre-Treatment [ ]  Relapse [ ]  Other, specify: Click here to enter text. |
| **DNA Details:** |
| **Biospecimen Type:** | [ ]  Tumor | [ ]  Normal (specify): Click here to enter text. *(i.e. tissue, blood, etc.)*  |
|  | **Downstream Application:** Click here to enter text. |
|  | **Amount requested:** Click here to enter text. µg | **Min. amount acceptable:** Click here µg |
|  | **Extraction method:** | [ ]  Qiagen  |
|  |  | [ ]  Column | [ ]  Bead |
|  |  | [ ]  PureGene (precipitation) |
|  |  | [ ]  Other: Click here to enter text. |
|  | **Quantification Method: PicoGreen** |
|  | **Quality Control Method: Agarose Gel to test integrity** |
| **Tissue Quality Control:** *\*for solid tissue samples\** |
|  | Percent tumor cutoff: Click here to enter text. % | Percent tumor necrosis cutoff: Click here % |
| **RNA Details:** |
| **Biospecimen Type:** | [ ]  Tumor | [ ]  Normal (specify): Click here to enter text. *(i.e. tissue, blood, etc.)*  |
|  | **Downstream Application:** Click here to enter text. |
|  | **Amount requested:** Click here to enter text. µg | **Min. amount acceptable:** Click here µg |
|  | **Extraction method:** | [ ]  mirVana |
|  |  | [ ]  PAXGene |
|  |  | [ ]  Trizol |
| ­ |  | [ ]  Other: Click here to enter text. |
|  | **Quantification Method by Qubit** |
|  | **Quality Control Method for frozen tissue: RIN (Agilent)** | Min RIN: Click here |
|  | **Quality Control Method for FFPE tissue: DV200 (Agilent)** | Min DV200: Click here |
|  | **miRNA’s needed:** | [ ]  Yes | [ ]  No | [ ]  Unknown |
| **Tissue Quality Control:** *\*for solid tissue samples\** |
|  | Percent tumor cutoff: Click here to enter text. % | Percent necrosis cutoff: Click here % |
| **Co-Isolation of DNA and RNA acceptable (as used in TCGA & more recent TARGET projects):** [ ]  Yes [ ]  No |
|  | Extraction method: | [ ]  Frozen Tissue: Qiagen AllPrep (DNA) & mirVana (RNA) |
|  |  | [ ]  Formalin Fixed Tissue: Qiagen AllPrep (DNA) & Roche (RNA) |

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| **LIQUID MALIGNANCY REQUEST** |
| **Liquid Biospecimens**[ ]  |
| **Diagnosis:**  | Click here to enter text. |
| **Timepoint:** | [ ]  Diagnostic/Pre-Treatment | [ ]  Relapse |
|  | [ ]  Remission/germline | [ ]  Other, specify: | Click here to enter text. |
| **Number of cases:** | Click here to enter text. |
| **Biospecimen Type:** | [ ]  Bone Marrow | Percent Leukemia blasts in diagnostic specimens: Click here to enter text. |
| [ ]  Peripheral Blood | Percent Leukemia blasts in diagnostic specimens: Click here to enter text. |
| **Specific Genetic Lesions:** | Click here to enter text. |
| **Nucleic Acids** [ ]  |
| **Diagnosis:** | Click here to enter text. |
| **Timepoint:** | [ ]  Diagnostic/Pre-Treatment | [ ]  Relapse |
|  | [ ]  Remission/germline | [ ]  Other, specify: Click here to enter text. |
| **DNA Details:** |
| **Biospecimen Type:** | [ ]  Tumor | [ ]  Normal (specify): Click here to enter text. *(i.e. tissue, liquid, etc.)*  |
|  | **Downstream Application:** Click here to enter text. |
|  | **Amount requested:** Click here to enter text. µg | **Min. amount acceptable:** Click here to enter text. µg |
|  | **Extraction method:** | [ ]  Qiagen  |
|  |  | [ ]  Column | [ ]  Bead |
|  |  | [ ]  PureGene (precipitation) |
|  |  | [ ]  Other: Click here to enter text. |
|  | **Quantification Method:** PicoGreen |
|  | **Quality Control Method:** Agarose Gel to test integrity |
| **Tissue Quality Control:** *\*for liquid samples\** |
|  | Blast percentage: Click here % |
| **RNA Details:** |
| **Biospecimen Type:** | [ ]  Tumor | [ ]  Normal (specify): Click here to enter text. *(i.e. tissue, blood, etc.)*  |
|  | **Downstream Application:** | Click here to enter text. |
|  | **Amount requested:** Click here to enter text. µg | **Min. amount acceptable:** Click here to enter text. µg |
|  | **Extraction method:** | [ ]  mirVana |
|  |  | [ ]  PAXGene |
|  |  | [ ]  Trizol |
| ­ |  | [ ]  Other: Click here to enter text. |
|  | **Quantification Method by Qubit** |
|  | **Quality Control Method by RIN (Agilent)** | Min RIN: Click here to enter text. |
|  | *\*applicable to prospective isolations only\** |
|  | **miRNA’s needed:** | [ ]  Yes | [ ]  No | [ ]  Unknown |
| **Tissue Quality Control:** *\*for liquid samples\** |
|  | Blast percentage: Click here to enter text. % |
| **Co-Isolation of DNA and RNA acceptable (as used in TCGA & more recent TARGET projects):** | [ ]  Yes | [ ]  No |
|  | Extraction method: | [ ]  Frozen Tissue: Qiagen AllPrep (DNA) & mirVana (RNA) |
|  |  | [ ]  Formalin Fixed Tissue: Qiagen AllPrep (DNA) & Roche (RNA) |

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| **TISSUE MICROAR****RAY REQUEST FORM** |
| ***If requesting Tissue Microarray slides, please use this page. All available designs are listed below.*** *Slides provided will be serial sections from the same TMA block. Each TMA includes a list of unique cases including age, gender, race, diagnosis (when available), and a map of the array and de-identified pathology reports from each case. We also offer a DVD with two 40X H&E images for $25.00 per array. The available TMAs have some accompanying annotation data (molecular and clinical) that may be incomplete for some biospecimens. Please contact the BPC for additional details.* |
| **TISSUE MICROARRAY (TMA) SLIDES** |
| *Please check the desired TMA below, indicate the number of slides requested per design and if you are interested in receiving the accompanying DVD.* |
| **TMA Type & description** | **Slides requested #** | **DVD** |
| Acute Myeloid Leukemia: 441 unique cases, 0.6 mm cores | Click here to enter text. | [ ]  |
| Anaplastic Large Cell Lymphoma: 19 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Brain Tumor Mixed 2017 (ATRT, Ependymoma, High Grade Glioma): 44 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Clear Cell Sarcoma of the Kidney: 67 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Congenital Mesoblastic Nephroma: 67 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Ganglioneuroma-Ganglioneuroblastoma: 64 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Glioma-low grade: 31 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Hodgkin’s Lymphoma (2006): 108 unique cases, 0.6 mm cores | Click here to enter text. | [ ]  |
| Hodgkin’s Lymphoma (2014): 130 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Liquid TMA – COG: 12 unique cases, 0.6 mm cores | Click here to enter text. | [ ]  |
| Mature B-cell Lymphoma: 16 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Lymphoblastic Lymphoma: 25 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Medulloblastoma - Big: 39 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Medulloblastoma – Small: 36 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Medulloblastoma 2018: 68 unique cases,  | Click here to enter text. | [ ]  |
| Mined 2017 (Wilms, NBL Stage 3, NBL Stage 4, Hepatoblastoma): 48 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Rhabdoid-small cohort: 21 unique cases, 1.0 cores | Click here to enter text. | [ ]  |
| Wilms Tumor: 58 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Wilms-all stages: 59 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Wilms – small: 24 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Wilms-Tiny Tumor: 38 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Ewing’s Sarcoma-biology: 25 unique cases, 1.0 mm cores  | Click here to enter text. | [ ]  |
| Ewing’s Sarcoma-therapeutic: 33 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Osteosarcoma-biology: 50 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Osteosarcoma-therapeutic: 29 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Rhabdomyosarcoma-Alveolar: 32 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Rhabdomyosarcoma-(2009): 57 unique cases, 1.0 cores | Click here to enter text. | [ ]  |
| Rhabdomyosarcoma-Embryonal: 26 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Infantile Rhabdomyosarcoma 2017 (< 1 year of age): 18 unique patients, 2.0 mm cores | Click here to enter text. | [ ]  |
| Sarcoma Mixed 2017 (ERMS, ARMS, UDS): 41 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Sarcoma Mixed 2017 (Osteo and EWS): 52 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Rhabdomyosarcoma Mouse – Big: 57 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |
| Rhabdomyosarcoma Mouse – Small: 57 unique cases, 1.0 mm cores | Click here to enter text. | [ ]  |

## **Additional Biospeci****men Information Required:**

Standard information provided at no additional cost includes age, gender, race and the final pathologic diagnosis (typically a de-identified pathology report) or BPC quality assessment where applicable. Any requests for additional information, e.g. clinical information, COG-identified biomarker results, outcome data, must be requested from the COG SDC.

Analyses may be done in collaboration with COG SDC statisticians in a fee-for-service arrangement with a technical report outlining primary analyses returned to the investigator. Alternatively, investigators may request data from the COG SDC for on-site analyses to be performed by a statistician approved by the COG SDC for oversight of released data.

The PI must sign a Data Use Agreement (DUA) with COG prior to release of annotated clinical data, and provide the CV or biosketch of the responsible accepting statistician. Availability and completeness of clinical information is not guaranteed.

Annotated Clinical Data Required: [ ]  Yes [ ]  No

If yes, then list clinical data elements required:

 Click here to enter text.