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| Program Director/Principal Investigator (Last, First, Middle): |  |
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| RESOURCES |
| Follow the 398 application instructions in Part I, 4.7 Resources. |
| **Investigators preparing grant proposals or manuscripts that involve subject consenting, phlebotomy, biospecimen collection and processing or translational genomics technologies are encouraged to contact Dr. Robin Leach or Dr. Teresa Johnson-Pais for a consultation, letter of support or resource section that is tailored to the goals of the grant proposal.** **UT Health San Antonio Biospecimen and Translational Genomics Core**:The Biospecimen and Translational Genomics Core provides state-of-the art services primarily in the areas of collection and banking of biological specimens, including regulatory document assistance, histology services, isolation of nucleic acids from biological specimens with integrity analysis, SNP genotyping (high throughput and single), absolute and relative quantification of RNA expression and the core provides users access to a BioRad real time PCR system, BioRad droplet digital PCR system and Leica Aperio Versa200 digital slide scanning system. The core directors counsel all users to help them select the optimal platform for their experiment within their financial limitations and to assist in experimental design. *Laboratory*: The biospecimen processing and histology services are provided at the UT Health San Antonio Biobanking Facility RAB 1.108, located on the Greehey Research Campus, that is a facility consisting of a freezer room and processing laboratory. The close location of the biospecimen laboratory to the Medical Arts Research Center (MARC) and Mays Cancer Center (MCC) enables the timely processing of clinical specimens, many of which are obtained from subjects enrolled in clinical trials. The translational genomics services are provided in a laboratory located on the 5th floor of the medical school on the Joe R. and Teresa Lozano Long Campus. *Instruments and Equipment*: InstrumentsThe Agena MassArray system enables the custom genotyping of SNPs in pools in multiplexes of 30. The BioRad CFXTouch Real Time PCR system enables the robust quantification of DNA and cDNA templates using fluorescence methodologies.The BioRad QX200 Droplet Digital PCR system allow the absolute quantification of both DNA and cDNA molecules using florescence technologies.The Agilent Bioanalyzer is used to analyze the quality of RNA samples prior to genomic analyses.The Agilent SureScan Microarray scanner is used for Agilent’s array CGH and transcriptome array analysis services.The Leica Aperio Versa200 digital slide scanner is optimized for precision scanning of brightfield and fluorescent samples.Sample Processing Equipment - The core has a specimen banking laboratory equipped with three biological safety cabinets, tissue culture incubators, phase contrast microscope, table-top centrifuges, refrigerators, and -20°C, -70°C and -135°C freezers with temperature monitoring probes. Histology Equipment - Microtome, Cryostat, Drying oven, Tissue Microarray System, Tissue-Tek TEC6embedding station*Services:*Genotyping-Allelic discrimination for SNPs using the TaqMan methodologyGenotyping-Medium throughput custom SNP genotyping using the Agena Mass Array TechnologyGene Expression-Gene expression analysis using Real Time PCR and Droplet Digital MethodologiesGene Expression-Whole genome gene expression for model organisms using Agilent GEX arraysNucleic Acids IsolationNucleic Acids Integrity AnalysisBiological Specimen Processing/Cryopreservation-Blood, Urine, Feces, Peripheral BloodMononuclear Cells, Adipose TissueShipping of Biological SpecimensHistology-Processing of Specimens for frozen and FFPE blocksSectioning of Frozen and FFPE blocksImbedding Tissues into BlocksCreation of Custom Tissue MicroarraysH&E staining of pathological specimensGathering of Clinical Data for Subject OutcomeSupport for Preparation of Regulatory Documents for Clinical Studies and MTACollection of Biospecimens From Research Subjects, Including PhlebotomyAperio Versa 200 Digital Slide Scanning and Analysis*Personnel:*Robin J. Leach, Ph.D., is the overall director of the Biospecimen and Translational Genomics Core. Dr. Leach is a Professor in the Department of Cell Systems and Anatomy. She has been directing a core facility for the cancer center since 1999. Teresa Johnson-Pais, Ph.D., is the co-director of the institutional core. She is a Professor in the Department of Urology and has a long history of collaborating with Dr. Leach and her laboratory group.   |

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