TRMC
TITUS REGIONAL MEDICAL CENTER

2001 N. Jefferson Ave. | Mount Pleasant, Texas 75455
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Request for Proposal

Imaging Equipment

ANNOUNCEMENT

Titus County Hospital District d/b/a Titus Regional Medical Center (hereinafter referred to as "TRMC") hereby invites proposals from qualified interested parties (hereinafter referred to as "Agency", "Proposer" or "Proposers") to provide Imaging Equipment to TRMC, pursuant to the terms and conditions hereinafter set forth in or referred in this Request for Proposal ("RFP").

The award shall be made at the sole discretion of TRMC to the Agency that best provides evidence of satisfactory qualifications and displays responsibility to fully meet the requirements as set forth by TRMC. Evidence of qualification and responsibility shall be furnished by the Agency as described in this RFP and will be reviewed by TRMC. The award shall not be made until TRMC has completed its review and verification of the Agencies qualifications.

TRMC reserves the right to reject any or all proposals and also reserves the right to decline the award to any or all Agencies. The submission of a proposal by any Agency does not by implication or expression commit TRMC to enter into an agreement with that Agency, or any other Agency. No agreement shall occur until a resolution formally approving such agreement has been enacted by TRMC and a written agreement has been executed.

TRMC will not be responsible for any costs incurred by an Agency in preparing, delivering or presenting responses to this RFP. Once submitted, Agency responses will be the property of TRMC and will not be returned.

By submitting an information package, the Agency represents that they have read and understand the RFP and are capable of fulfilling all requirements.

Proposals, subject to the terms and conditions stated herein, must be sent via email to the Key Contact listed below by September 4, 2020 at 17:00 CST. The subject line should include "Imaging Equipment RFP."

Key Contact Information

Reese Arnett
Director of Materials Management
reese.arnett@titusregional.com
903-577-6161

Background

Titus Regional Medical Center (TRMC) is a 174 licensed bed (8 ICU beds), Level III Trauma Center located in East Texas. Average daily medical census is approximately 70-90 (seasonal) including an 8 bed ICU that runs an ADC of 4-6, with occupancy increasing due to the recent addition of a cardiac cath lab, a certified stroke program, and additional primary care providers. TRMC also provides maternal and pediatric services, inpatient rehabilitation and geriatric behavioral health services that are not a part of this RFP. TRMC is a Level III lead trauma center seeing approximately 25,000 patients per year, with an inpatient admission rate of approximately 18%. Approximately 1,000 babies are born at TRMC each year and our community boasts the largest volume pediatric practice in the region.

The Imaging Department at TRMC is looking to purchase/replace current equipment to include inpatient CT scanner, U-Arm Orthopedic Radiographic System, Radiographic and fluoroscopy system, Breast Imaging Equipment (3D Tomo, Breast biopsy and 3D Automated Breast Ultrasound), Surgical C-arm, General Nuclear Medicine system and Dedicated Cardiac Nuclear Medicine system. These purchases will be strategically made over the next 24 months and TRMC would like to partner with a vendor that can offer a package discount where available.

Scope

Under the proposed agreement, the selected Agency will provide Imaging Equipment according to TRMC's specifications listed below.

Inquiries

We encourage inquiries and welcome the opportunity to answer questions from potential applicants. Questions submitted in writing will be returned within five business days. Written questions should be emailed to Reese Arnett at reese.arnett@titusregional.com. Any oral communication shall be considered unofficial and non-binding with regard to this RFP.

Scope of Responses

Interested Proposers must submit their responses to all sections of this RFP and include all requested information. Proposers who wish to send additional materials are welcome to do so, but these materials may not be considered in the evaluation process. All materials must be converted to one PDF file and submitted via email to reese.arnett@titusregional.com.

Confidentiality

Due to the competitive nature of this RFP, to the extent permitted by law, all Proposer responses will be confidential.

Evaluation of Vendor Responses

TRMC has established a working group to review the documentation received in response to this RFP. During the review process, additional information may be required of the vendors and some vendors may be invited to present directly to the team.

RFP Schedule

RFP Schedule	
Deliverable	**Date**
RFP Launch Date	August 14, 2020
RFP Due Date	September 4, 2020
Notification of Selection	September 30, 2020

Specifications
The specifications list below includes the primary equipment desired. Please include any additional recommended accessories as separate line items with individual pricing.

Description	Included Y/N	Comments (if Needed)
1) 128 Slice Single Tube/Single Source CT Scanner - Generator ≥ 70 kW - Tube = min 70 – 140kV settings - mA Range ≥ 10-800mA - Scan Range ≥ 200cm - Scan FOV ≥ 50cm - Advanced filtering for dose and artifact reduction - Table weight capacity ≥ 550lbs		
CTA software/package - Must include general CTA applications to include: - CTA Head and Neck - CTA Chest Abdomen Pelvis - CTA Pulmonary Embolism - CTA Runoff of lower extremities - CTA Upper Extremities - Both Automated and manual 3D tools - Automated MPRs		
Neuro Package to Include: - Neuro Perfusion - LVO detection - Automated Color volume mismatch mapping - One Click Bone Removal - Ability to scan large portion of the brain either by large		

Description	Included Y/N	Comments (if Needed)
detector or table jogging movement		
Lung Imaging Package to include - Low Dose Chest Protocols - Advanced Dose Modulation for lung imaging		
Prospective and Retrospective Metal Artifact detection and reduction software		
Automated bone removal functionality. - Preconfigured algorithms to facilitate fast removal of bone structures for three dimensional presentation and analysis.		
Iterative reconstruction - Model-based iterative preferred		
Cardiac Package to include - Minimum 0.33 sec rotation speed - ECG Gating - Calcium Scoring - Coronary CTA Scan Modes (Prospective and Retrospective) - Software for advanced 3D post-processing, either included on scanner or through additional workstation if necessary (Heart isolation, coronary tree, individual vessel recons) - Automated curved planar recons (CPR) - Advanced dose modulation for cardiac		
- **Automated Spine Recons** (including coronal and sagittal with spinal body labeling)		
- **Tilted Spiral Scanning**		

Description	Included Y/N	Comments (if Needed)
- **Real Time Imaging-ability** to see slices as patient passes through scanner		
- **Auto-adjust features** for faster workflows		
- **NEMA XR-29 Compliant**		
- **QA Phantom**		
- **Contrast Injector** with interfacing package		
- **Installation:** The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system. - **Project Management:** The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness. - **Service Support:** The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. - **Applications Support:** The proposal shall provide both on-site and off-site training (if applicable) for the technologist. Off-site shall include air fare and hotel accommodations.		
- **Warranty Length**		
- **Option a mobile CT** for duration of removal of current system and installation of new system		
2) Digital X-ray- Ortho		
U-Arm radiographic system - SID minimum 40”-72”		

Description	Included Y/N	Comments (if Needed)
- Fully motorized - Automated/programmable positioning - 65kW or greater generator - 400kHU or greater radiographic tube - detached wireless digital detector - patient exam table - digital detector protective cover for erect feet, etc. - **Installation:** The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system. - **Project Management:** The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness. - **Service Support:** The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. - **Applications Support:** The proposal shall provide both on-site and off-site training (if applicable) for the technologist. Off-site shall include air fare and hotel accommodations.		
Warranty Length		
3) Radiographic/Fluoro Unit		

Description	Included Y/N	Comments (if Needed)
Full digital radiographic/fluoroscopy system (Multi-purpose) with chest radiography capabilities		
Basic system A multifunctional digital single plane X-ray angiography system is needed for diagnostic and interventional examinations on recumbent patients, both infants and adults for the following examinations: - Gastrointestinal examinations - Urogenital tract, thorax, abdomen - Peripheral angiography - Modern therapeutic vascular and nonvascular interventional procedures **C-arm and patient positioning** **C-arm positioning:** - Can the C-arm be operated in overtable and undertable position? - What is the maximum patient coverage (without repositioning the patient) for peripheral applications? - What is the possible longitudinal movement of the C-arm? - What is the possible longitudinal movement of the tabletop? - How many C-arm positions are programmable? - Is there collision protection or a safety		

Description	Included Y/N	Comments (if Needed)
system for the C-arm movements? **Table** - What are the dimensions of the tabletop (L x W)? - What is the tilt range of the tabletop? - What is the maximum patient weight for a horizontal table/system? - What is the maximum patient weight for a tilted table? **Accessories** **Are the following accessories included in the scope of delivery?** - Trolley to hold the operating modules for table, C-arm, collimators, and interactive touchscreen for the imaging system / exposure parameters / image post-processing functions - Footboard - Attachment rails for use of the tableside control modules - Wireless Footswitch for acquisition and fluoroscopy **Fluoroscopy** - What pulse frequencies are possible? **DR acquisitions** - What frame rates can be used for acquiring images with digital real-time filtering? - What frame rates are available for acquiring digital subtraction images? **Generator**		

Description	Included Y/N	Comments (if Needed)
- 100KW Generator with fully integrated system control and automatic regulation of radiation power for all fluoroscopy and imaging modes. - Modes required for all interventional applications such as DSA, rotational DSA, pulsed fluoroscopy, single exposure, and kV reduction technology are supported without limitations. - How many programmable organ programs are available for fluoroscopy and acquisition? **X-ray tubes** - Triple-focus high-performance X-ray tube assemblies for angiographic X-ray studies, with metal center tube using liquid bearing technology for constant noiseless rotation. - Durable, low-noise X-ray tube with high performance and immediate radiation release with suitable focal spots for fine details and lengthy interventions for patients of all sizes. No interruptions for tube cooling required. - 3 Focal spot sizes micro, small, large - Max. heat content of the X-ray tube assembly		

Description	Included Y/N	Comments (if Needed)
- Anode heat dissipation (HU/min) **High end HD Detector** - Flat detector image acquisition system - High-resolution, dynamic flat detector for a fully digital imaging chain, with an integrated, removable grid, a measurement chamber for recording the dose-area product, a 3-focus high-power X-ray tube with a rotating collimator for angiographic examinations and integrated collision protection. - What is the largest active exposure field of the flat detector? **Collimator** - Compact collimator with rectangular blade for angiography examinations. - The collimator must simplify correct collimation in all intended applications and provide the correct filtering for the lowest possible skin entry dose in fluoro and acquisition mode. - Can the wedge-shaped semi-transparent collimator leaves also be displayed (e.g., with semi-transparent filters for DSA)? - How many and what type of filters? - Can the semi-transparent leaves be		

Description	Included Y/N	Comments (if Needed)
rotated relative to the position of the object? **Image processing** **Are the following image processing parameters standard?** - Parallel acquisition, processing, display and storage in background mode - Automatic real-time processing with edge enhancement, contrast enhancement, windowing, and image filtering? - Zoom, roaming, electronic collimator? - Automatic adjustment of the tube assembly collimator for fluoroscopy or exposure scene according to the electronic collimator in the LIH image? - Text functions: User-definable image annotation, free annotation or by means of text components, comments line for the image, R/L display? - Fast and direct access to all series, single images both in the examination and control room? - Quantification: Angle/length measurement, automatic and/or manual calibration? - Automatic real-time pixel shift? - Flexible pixel shift? - Remasking? - Hold image with maximum/minimum		

Description	Included Y/N	Comments (if Needed)
contrast (min/max peak opacification)? - Image stacking? - Image reversal? - Review images in slow motion, forwards and backwards by single image? **Digital imaging and post-processing** - The digital imaging system has to work with the latest technology and support all the required post-processing and display features for all special examinations. **Dose-saving and dose documentation measures** - Effective measures must be taken to reduce dose for patients and personnel. The system enables significant dose reduction through a special filter in fluoroscopy and radiography mode, pulsed fluoroscopy at low output, and comprehensive dose-saving measures. - Can the collimator leaves and semi-transparent filters also be adjusted as a graphical overlay on the LIH without any need for fluoroscopy or radiation? - Is it possible to reposition an object under visual control without radiation? - Can the measured dose-area product and the		

Description	Included Y/N	Comments (if Needed)
calculated patient entry dose be shown on the monitor? - Can the dose information be displayed in DICOM format after each examination? **Networking via DICOM** - Networking via a network interface from an HIS/RIS to the system and from the system to an HIS/RIS must be supported. - The exchange of patient data, images, scenes, and analyses must be achieved using DICOM standards. Worklist retrieval from HIS/RIS **Laser crosshairs** - Are laser crosshairs integrated into flat detector cover for easier, faster, and dose-saving positioning of the patient? **Installation:** - The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system. **Project Management:** - The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness.		

Description	Included Y/N	Comments (if Needed)
Service Support: - The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. **Applications Support:** - The proposal shall provide both on-site and off-site training (if applicable) for the technologist. Off-site shall include air fare and hotel accommodations. **Warranty Length:**		
4) 3D Breast Tomosynthesis System, with 2D mammography capabilities - Marketing Package - # of microns 2D - # of microns 3D - # of projections per acquisition - Degree of acquisition angle - Processing time between image acquisitions - Open Mag Paddle - Diag Paddle Kit - Magnification Kit - Storage Cabinet/Rack - Needle Localization Paddle - Computer Aided Detection (CAD) 2D and 3D		
Biopsy Attachment System - Stereotactic Biopsy Attachment - Tomo Biopsy Attachment - Biopsy Chair - Specimen Radiographic System		

Description	Included Y/N	Comments (if Needed)
3D Automated Breast Ultrasound System		
Comfort Features, such as chairs and chair/tables		
Warranty Length		
- **Installation:** The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system. - **Project Management:** The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness. - **Service Support:** The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. - **Applications Support:** The proposal shall provide both on-site and off-site training (if applicable) for the technologist. Off-site shall include air fare and hotel accommodations.		
5) Surgical C-Arm Unit **Digital Surgical C-Arm for general surgery, orthopedic surgery and pain management** - 21cm Digital Flat Panel Detector - Automated dose optimization - Automated brightness and contrast		

Description	Included Y/N	Comments (if Needed)
- Wireless network connectivity to include Dicom 3.0 image transfer. - Monitor cart - Worklist retrieval from HIS/RIS - Dicom dose structured reporting - Plain paper printer - Warranty Length - **Service Support:** The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. - **Applications Support**: The proposal shall provide both on-site and off-site training (if applicable) for the technologist. Off-site shall include air fare and hotel accommodations.		
6) 2 (TWO) Nuclear Medicine Systems **a) General/Cardiac** **b) Dedicated Cardiac** **A dual detector variable angle gamma camera with integrated patient bed, and one integrated acquisition and processing workstation.** **SPECT Gantry** - Detectors shall be shielded for high energies up to 511 KeV. - Detectors shall have true rectangular FOV - UFOV Field of View shall be a full field of view		

Description	Included Y/N	Comments (if Needed)
capable of imaging general nuclear medicine exams including whole body bone scans and cardiac SPECT - The gantry should support variable angle configurability of the detectors including 90˚, 180˚ SPECT, and angle <90 degrees optimized for cardiac SPECT imaging. - At least one of the detectors shall permit caudal and cephalic tilt of >15 degrees, allowing detector positioning as close to imaging area as possible, and detector motion shall allow patient imaging in sitting and standing positions. - Necessary hand controls, for gantry and detector motion, shall be provided on both sides of the gantry. - The system shall support Step and Shoot and Continuous SPECT detector rotation modes. - The system shall support Non-circular orbits and automatic contouring for SPECT acquisitions with all detector configurations (90˚, 180˚, and angle <90 degrees) - The gantry shall have an opening of at least 70 CM - The gantry shall have safety features including emergency stop buttons on both sides of the gantry, and patient contact sensors on each collimator - The gantry shall be linked to the patient table and have the necessary sensors to recognize the patient table		

Description	Included Y/N	Comments (if Needed)
position at all times to prevent accidental collisions. - Detector heads must extend out from the gantry far enough to facilitate imaging in a hospital bed as well as a stretcher, without having to move the patient to the edge of the bed in a dangerous position. - The status of the acquisition and gantry should be available at the gantry. (i.e., p-scope, dual detector acquisition display, patient positioning display, patient table and detector angle position, radius and tilt). - The patient positioning monitor shall be a touch-screen type for easy interaction. - Collimator changing shall be possible without moving the patient table away. If removal of the table is required, please provide the weight of the table and process required to remove and place the table back into position. - Collimators must include: Low Energy High Resolution and Medium Energy General Purpose - The system shall allow for scheduled daily, weekly and monthly quality control procedures. **Patient Bed** - The patient bed shall have motorized vertical & horizontal motion activated from the hand controls, as well as preset positions.		

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- Patient bed shall have ability to position any part of body under the detectors without moving the patient. All pallet motions shall be activated from the hand controller. - The attenuation of the pallet at 140 keV should be < 10% - Whole body scan Length shall be at least 200 cm - Patient Table: Maximum patient load shall be > 227 kg (500 lbs). - Table top must be able to pivot for access to the gantry to image patients. **Data Acquisition:** - The system shall be totally and easily configurable by the user (acquisition, processing and display). - The system shall support user-defined SPECT acquisition and processing protocols. - The user should be able to create, change, modify and combine acquisition and processing protocols easily and quickly. - The system shall support automated data transfer for viewing, automated archiving and hardcopy printing. - The software shall offer on-line help capability. - System must offer an iterative reconstruction technique, or ½ time imaging solution for all SPECT imaging including cardiac - System must offer an iterative reconstruction technique, or ½ time		

Description	Included Y/N	Comments (if Needed)
imaging solution for Planar Imaging - Start and stop acquisition control from Camera, hand control Computer or Persistence Scope must be possible - The system shall allow the user to combine acquisition and processing protocols in one protocol. In addition the system shall be capable of combining multiple SPECT acquisitions (e.g. Cardiac Stress & Rest acquisitions) in one protocol - Whole body SPECT scan length shall be at least 200 cm - Acquisitions must be in the form of static, dynamic, whole-body, gated, SPECT, dynamic SPECT, WB SPECT and gated SPECT. - System shall provide factory-recommended protocols with full automatic contouring for all clinical acquisitions, including cardiology, oncology, neurology. **Specifications** - The system sensitivity must be greater than 200 cts/min/uCi per NEMA NU 1-2012 - The system shall include the latest Low Energy High Resolution Collimators that are both High Sensitivity and High Resolution - The FDA 510K Approval of the proposed system shall be 2016 or thereafter. **Miscellaneous** - Software for archival and retrieval of scan and image		

Description	Included Y/N	Comments (if Needed)
data must be provided and described in the proposal. - The system shall support the use of USB drives for fast easy storage - Installation: The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system. - Project Management: The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness. - Trade-in: The proposal shall include the trade-in and removal of the existing ADAC/Cardia MD cameras. - Cardiac Software: The proposal shall include the latest 4DM-Spect Processing software. - Phantom: The proposal shall include a 4 bar phantom for quality control. - UPS: The proposal shall include a UPS for both the processing workstation and the system with 10 minutes of backup. - Warranty Length - Installation: The proposal shall include the installation of the system. The vendor shall specify in preliminary drawings the room requirements and site readiness required to support the system.		

Description	Included Y/N	Comments (if Needed)
- Project Management: The proposal shall include project management to support the delivery and installation of the system including final room drawings to insure site readiness. - Service Support: The proposal shall include a service contract detailing response times, parts/labor coverage, and operating software updates. - Applications Support: The proposal shall provide both on-site and off-site training for the technologist. Off-site shall include air fare and hotel accommodations.		

Additional Information

I hereby acknowledge that the above information is accurate and completed to the best of my knowledge.

Name:_____ Date:_____

Title:_____

Organization:_____