EXECUTIVE OVERVIEW

The H. Lee Moffitt Cancer Center & Research Institute (MCC), located in Tampa, Florida, began operations in 1986. As an academic and research medical center, MCC is the only National Cancer Institute-designated oncology research institute in Florida and one of the Southeast's leading cancer centers.

Comprised of an inpatient facility, ambulatory outpatient surgery center, ambulatory clinics, a cancer screening facility and research laboratories, MCC offers a sophisticated network of services and technologies that assure the citizens of its region convenient, cost-effective, high quality health care. Moffitt's workforce is currently comprised of approximately 5300 employees, 700 medical residents, 600 volunteers, and 1000 students and interns.

OBJECTIVE

The purpose of this Request for Proposal is to acquire two linear accelerators. The first will be installed in an existing vault at the main campus of Moffitt Cancer Center (12902 Magnolia Drive, Tampa, FL), and the second will be installed at a new facility currently under construction.

COMMUNICATION

All proposals, communications, and correspondence required during the Request for Proposal process must be directed to:

Lori Perks
Sourcing Analyst
rfp@Moffitt.org

Failure to adhere to this requirement may result in your organization not being considered.

TIMELINE

This Request for Proposal shall be conducted under the following time line, which is subject to change only upon prior approval by Purchasing and granted to all vendors.

<table>
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<tr>
<th>Event</th>
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<tbody>
<tr>
<td>Issuance of Bid</td>
<td>06/14/2019</td>
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<tr>
<td>Return of Intent to Bid</td>
<td>06/21/2019</td>
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<tr>
<td>Vendor Conference Call</td>
<td>06/25/2019</td>
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<tr>
<td>Bid Packages Due from Vendors</td>
<td>07/10/2019</td>
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<tr>
<td>Award of Bid</td>
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VENDOR PRE-SUBMISSION CONFERENCE

Moffitt Cancer Center will conduct a vendor Pre-Submission conference call to further clarify and discuss the requirements of this RFP on June 25, 2019 1:00pm-2:00pm EST: 800-206-6032 Conference ID: 7457113.
On the date indicated in the timeline section of this RFP Overview, your bid must be received via e-mail to contact listed above no later than 2:00p.m. EST.

**RFP CONTENTS**

The RFP package includes the following documents, which require response as part of the vendor’s proposal as indicated:

1. Cover Letter (e-mail)
2. Overview Document
3. Vendor Acknowledgement Form – requires response
4. Supplier Diversity Utilization and Subcontracting Plan – requires response
5. Statement Of Work/Need Requirements – requires response

Your response should be provided in electronic format. **All responses will be confidential.**

**AWARD CRITERIA**

The award of this Request for Proposal is subject to terms and conditions contained herein and any that will be developed by Moffitt Cancer Center during the Request for Proposal process to augment purchase order conditions of purchase.

Quality of service, pricing, products, Supplier Diversity and other terms of purchase will be an integral part of the decision selection process.

If you are awarded this bid, a guideline will be developed that will quantify, monitor, and provide a plan for cure of deficiencies which shall include, but not be limited to, reimbursement of personnel and administrative costs, monetary assessment for continual deficiencies, and possible cancellation of agreement.

We reserve the right to award this agreement in whole or in part to the vendor that can best meet Moffitt’s business needs.

H. Lee Moffitt Cancer Center assumes no responsibility and bears no liability for costs incurred by a Company in the preparation and submittal of a quote proposal in response to this RFP.

**STATEMENT OF WORK**

**A. SAFETY AND REGULATORY REQUIREMENTS**

We require that the selected system meet all the regulatory requirements of the state of Florida, the recommendations of the AAPM, and NRCP. In the event where two recommendations exist, the more conservative regulation will apply. All Florida state requirements are listed on the State of Florida’s web site.

**B. RIGGING AND DELIVERY**

1. The successful vendor shall provide the riggers for the delivery of accelerators and any additional costs should be included in your proposal.
2. Buyer will take possession of the units after they are safely bolted in at the designated vaults. All requisite insurance is the responsibility of the vendor.
3. Delivery to the hospital will need to occur off hours, and the hospital floors must be protected. Please provide detailed plan for moving the accelerators through the hospital and during what hours the delivery will be made.
4. Attached is a copy of the vault plans. Please provide full site drawings for the installation of your accelerator in our vaults.
5. Provide a full description and time line for the installation process.
6. Please provide a detailed description and quotes for the standard warranty and any extended warranty options.

7. Please provide a detailed description and pricing for service contract options for the first 5 years of ownership.
   a. It is anticipated that there will be hardware as well as software upgrades and these should be included in your estimates.

8. The successful vendor will be required to review all power and cooling water specifications with the facilities group at the designated installation site. Please describe your procedures for ensuring that proper facilities are present in the vault prior to delivery.

C. TRAINING

1. Full off site training on applications for 2 therapists, and on-site training for a minimum of additional 4 therapists.

2. Training on all aspects of clinical use, quality assurance and basic maintenance for 1 physicist, prior to acceptance testing.

3. Describe any other education offers and user group options.

D. SUPPORT AND HELP DESK

Provide overview of support services and support options. The following are but a few areas for clarification:

1. On-line system support from manufacturer’s support facility (confirm VPN implementation).

2. Coverage on daily extended hours, Holidays, weekends, and evenings.

3. Rapid response to issues and questions.

4. Follow through on issues or questions that require help from more experienced software engineers, applications specialists or physicists.

5. In system Help screens.

6. Define cost associated with support, what is included and what is not.

E. ACCELERATOR SPECIFICATIONS – Main Campus

1. The accelerator is intended for general radiotherapy applications although there is special interest in adaptive radiotherapy capabilities. Please list current and planned adaptive radiotherapy features.

2. The multileaf collimator (MLC) effective leaf width shall not exceed 5.0 mm at isocenter in the central portion of the field. Please describe MLC.

3. Capability to treat extended field sizes is required. Please specify maximum field size and describe mechanism to treat fields that extend beyond 40 cm (e.g. craniospinal or total body irradiation).

4. The linac will be able to deliver 6MV photon beam. (The existing vault is shielded for 6MV). Please specify maximum and range of dose rates and any special characteristics (e.g. flattening free filter modes).

5. Specify source to axis distance (SAD), and clearance around the patient (distance from face of gantry to isocenter).

6. Imaging tools:
   a. Linacs shall have capabilities to do planar MV imaging, planar kV imaging, and kV cone beam CT (CBCT), 4D CBCT, triggered imaging and auto beam hold.
   b. Compare kV CBCT image quality to a standard radiotherapy simulation single-energy CT.
c. Software shall be included to perform image registration with planning generated digitally reconstructed radiographs and CTs.

7. The overall MV isocenter (gantry, collimator and table rotations) shall be confined to a sphere no more than 1.5 mm diameter.

8. MV to kV isocenter coincidence:
   a. MV and kV isocenters shall intersect within a sphere no more than 1 mm diameter.
   b. Automated internal software tools shall be provided to verify and, if necessary, adjust the MV to kV coincidence.

9. The linac shall be compatible with Mosaiq Record and Verify system. Please specify the version(s). If not fully compatible, describe the proposed workflow and any additional software necessary.

10. The linac shall be able to support Raysearch treatment planning systems (TPS). If there are particular modalities not supported please specify. What other major TPS are supported or specifically excluded? If not compatible, describe the proposed workflow and any additional software necessary.

11. If appropriate, the beams should be matched to the existing 6MV and 6MV FFF beams.

12. Couch top must be indexable and compatible with kV imaging.

13. Couch top attenuation should be less than 2% for the 6MV photon beam.

14. Couch should be capable of supporting patients up to 450 lbs. Please state specification for maximum couch deflection for a specified weight.

15. Couch must have 6 degree of freedom adjustment capabilities (X,Y,Z translations and pitch, roll, attitude rotations).

16. The vault will be outfitted with LAP Apollo green lasers as appropriate.

17. The vault will be equipped with appropriate patient monitoring devices (TV monitors and audio) to allow supervision of, and communication with the patient without having to enter the vault.

18. The linac should be able to deliver respiratory-gated treatments. Please describe in detail how your linac will accomplish this.

19. Describe motion-management techniques available with the accelerator.

20. Treatment techniques:
   a. IMRT using sliding window and/or step and shoot
      i. Leaf accuracy of 0.3 mm or better at isocenter.
      ii. Leaf interdigitation.
      iii. Please describe the largest fields that can be delivered using IMRT.
   b. VMAT.
   c. 3D conformal radiotherapy.
   d. Stereotactic Body Radiotherapy (SBRT). Please describe pertinent immobilization devices supported.

F. ACCELERATOR SPECIFICATIONS – Satellite Campus

The multileaf collimator (MLC) leaf width shall not exceed 5.0 mm at isocenter in the central portion of the field. Please describe MLC.

1. Capability to treat extended field sizes is required. Please specify maximum field size and describe mechanism to treat fields that extend beyond 40 cm (e.g. craniospinal or total body irradiation).

2. Specify source to axis distance (SAD).

3. The accelerator should be capable of delivering wedged fields using a dynamic delivery technique (or motorized wedge) for up to a 60 degree wedge.

4. The accelerator must have tray mounts for blocks, compensators, and electron cones ranging in size from 6 X 6 cm to 25 X 25 cm. The electron cones should all be capable of accepting electron cut outs.
5. The linac will be able to deliver photons with energies of 6MV, 10MV and 15 MV. Please specify the maximum dose rates for these standard photon beams, and options for higher dose rates (e.g. FFF). It is preferable if beams can be matched to those currently at Moffitt. Describe your photon beam matching procedures and the accuracy with which you can match these beams.

6. The linac will be able to deliver electrons with energies of 6, 9, 12, 15, and 18 MeV. Please specify the maximum dose rate for these electron beams, and options for higher dose rates (e.g. for total skin electron therapy). It is preferable if beams can be matched to those currently at Moffitt. Describe your electron beam matching procedures and the accuracy with which you can match these beams.

7. Couch top must be indexable. Couch top attenuation should be less than 2% of the 6MV photon beam. Couch should be capable of supporting patients up to 450 lbs. Please state specification for maximum couch deflection for a specified weight.

8. All the vaults will be outfitted with LAP Apollo green lasers. Three crosshair, and one sagittal laser per vault.

9. All vaults will be equipped with appropriate patient monitoring devices (TV monitors and audio) to allow supervision of, and communication with the patient without having to enter the vault.

10. The linacs should be able to deliver gated treatments. Please describe in detail how your linac will accomplish this.

11. Imaging tools:
   a. Linacs shall have capabilities to do planar MV imaging, planar kV imaging, and kV cone beam CT (CBCT), 4D CBCT, triggered imaging and auto beam hold.
   b. Compare kV CBCT image quality to a standard radiotherapy simulation single-energy CT.
   c. Software shall be included to perform image registration with planning generated digitally reconstructed radiographs and CTs.

12. Treatment Techniques:
   a. IMRT using sliding window and/or step and shoot
      1. Leaf accuracy of 0.3 mm or better at isocenter.
      2. Leaf interdigitation.
      3. Please describe the largest fields that can be delivered using IMRT.
   b. Intensity Modulated Arc Therapy (VMAT or Rapid Arc):
      1. Describe the capabilities to deliver conformal plans using this technology.
      2. What if any additional hardware and software (including planning software) will be required to deliver Intensity Modulated Arc Therapy.
   c. Tools for Stereotactic Body Radiotherapy (SBRT):
      1. Small leaf widths (effective 5mm or less) for SBRT fields.
      2. The ability to adjust couch position from the console area based upon imaging (either 2D-2D or CBCT).
      3. 6 degree of freedom couch.
   d. 4D gated radiotherapy. Please describe gating technique and workflow.
      2. Small leaf widths (effective 5mm or less) for shaped fields.
      3. Isocenter walkout of 0.75 mm radius or less.
      4. iii. The ability to integrate with imaging system to allow for automated couch motion from the treatment console.
      5. iv. Automated verification of correlation between stereotactic laser based positioning system with the accelerator.

G. PHYSICS

1. The acceptance test document will be made available to the physics group prior to installation.
2. PDD, and flatness and symmetry specifications for each beam will be described.
3. The beam steering system and expected beam flatness and symmetry changes with gantry rotation will be described in detail.

4. QA tools for routine QA of the imaging systems should be provided and described in the proposals.

5. Describe access to accelerator delivery log files for quality assurance.

6. Describe availability of non-clinical treatment delivery (direct DICOM RT Plan read, XML file read, etc.).

7. Describe availability of any special Physics/Research modes and include in the quotation.

H. INTERFACES & SYSTEM UTILITIES

1. DICOM import and export of RT objects to image guidance workstation. Describe DICOM functions supported.

2. Automated image registration tools.
   a. Describe your tools for registering volumetric data.
   b. Describe your tools for registering 2D data with DRRs.
   c. Describe any tools available for comparing fluoro images with 4D image sets acquired during simulation. (Cine DRRs).

3. Please describe any advanced imaging features, matching algorithms, etc.

4. Describe the process for storage and review of IGRT images.

5. Describe any techniques you use to interface with third-party beam-interruption (gating) systems. Provide the cost of such interface(s).
## Moffitt Cancer Center
### Vendor Acknowledgement Form
#### Intent to Respond

<table>
<thead>
<tr>
<th>SUBMIT TO:</th>
<th>RFP NUMBER: 19-20-SSP</th>
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<tbody>
<tr>
<td>Lori Perks</td>
<td>RFP TITLE: ACQUISITION OF LINEAR ACCELERATORS</td>
</tr>
<tr>
<td><a href="mailto:rfp@Moffitt.org">rfp@Moffitt.org</a></td>
<td></td>
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<tr>
<td>813-745-8706</td>
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<tr>
<td>813-449-8277 (Fax)</td>
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<tr>
<th>VENDOR NAME and MAILING ADDRESS:</th>
<th>INTENT TO BID:</th>
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<tr>
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<td>Yes ___________</td>
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<tr>
<th>VENDOR’S AUTHORIZED CONTACT FOR RFP</th>
<th>Please let us know how you heard about this RFP:</th>
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<tr>
<td>NAME</td>
<td>__ Notified by Purchasing</td>
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<tr>
<td>E-MAIL</td>
<td>__ Community or MWBE Organization</td>
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<td>__ Monitoring Moffitt Website</td>
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### SUPPLIER DIVERSITY INFORMATION

Is your firm a certified "Minority, Women-Owned, Veteran, Service Disabled Veteran-Owned Business Enterprise" defined as a business concern engaged in commercial transactions and is a least fifty-one (51%) percent minority, woman, veteran, service-disabled veteran-owned, and whose management and daily operations are controlled by such persons?

Yes ________________________  No ____________________

If your firm is certified as a “Minority, Woman, Veteran, or Service Disabled Veteran-Owned Business Enterprise,” you must provide a current copy of your certificate with this form, and provide the name of the certifying entity and certification dates below:

Name of Certifying Entity ____________________________
Certification Date Begins ___________________________ Ends ___________________________

I certify that this response is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies or equipment, and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this response and certify that I am authorized to sign this response for the vendor and that the vendor is in compliance with all requirements of the Request for Qualifications.

Signature ____________________________ Printed Name and Date ____________________________
SUPPLIER DIVERSITY UTILIZATION AND SUBCONTRACTING PLAN
REQUIREMENT

Moffitt Cancer Center recognizes the importance of supplier diversity in all aspects of our business and procurement practices and actively encourages the development, utilization and economic growth of certified Minority, Women, Veteran and Service Disabled Veteran-owned Business Enterprises (MBE/WBE/VBE/SDVBE). Central to this initiative is the inclusion and participation of a diverse group of vendors doing business with Moffitt Cancer Center and as such, Moffitt encourages the participation of certified MBE/WBE/VBE/SDVBEs in its procurement process both at the prime vendor level as well as at the subcontractor level of its prime contracts. Moffitt Cancer Center is committed to a comprehensive Supplier Diversity Program that ensures maximum opportunities exist for such diverse businesses.

RFP responses should include firm’s ability to provide fifteen percent (15%) spend with certified Minority, Women, Veteran and Service Disabled Veteran-owned Business Enterprises (MBE/WBE/VBE/SDVBE) related to the specific commodity or services identified in the proposal. Moffitt Cancer Center is an equal opportunity corporation, and, as such, strongly encourages the lawful use of certified MBE/WBE/VBE/SDVBEs in the provision of services by providing a fair and equal opportunity to compete for, or for participation in, providing services. Moffitt Cancer Center believes in equal opportunity practices which conform to both the spirit and the letter of all laws against discrimination, and is committed to non-discrimination because of race, creed, color, sex, age, national origin, or religion. To be considered for inclusion the potential firm commits to MBE/WBE/VBE/SDVBEs Participation.

The successful firm shall endeavor to provide fifteen percent (15%) spend with MBE/WBE/VBE/SDVBE related to the specific commodity or services identified in the proposal. A certification letter from any of the following agencies will be required of any firm and/or identified subcontractor claiming MBE/WBE/VBE/SDVBE status at the time of the RFP response.

Moffitt accepts all Local, State and Federal Government agencies MBE/WBE certifications, including the following:
- City of Tampa
- Hillsborough County
- State of Florida
- Small Business Administration (SBA) 8A Program Certification

Other MBE/WBE certifications accepted include:
- Florida State Minority Supplier Development Council (FSMSDC)
- National Minority Supplier Development Council (NMSDC) & regional affiliates
- Women’s Business Enterprise National Council (WBENC)
- National Women Business Owners Corporation (NWBOC)

Veteran & Service Disabled Veteran (VBE/SDVBE) Certification/Verification accepted:
- Department of Veterans Affairs
- State of Florida Office of Supplier Diversity

Please respond to the section below:

Supplier Diversity Utilization and Subcontracting Plan Requirement: Moffitt Cancer Center recognizes the importance of supplier diversity in all aspects of our business and procurement practices and actively encourages the development, utilization and economic growth of certified Minority, Women, Veteran and Service Disabled Veteran-owned Business Enterprises (MBE/WBE/VBE/SDVBEs). Central to this initiative is the inclusion and participation of a diverse group of vendors doing business with Moffitt Cancer Center and as such, Moffitt encourages the participation of certified MBE/WBE/VBE/SDVBEs in its procurement process both at the prime vendor level as well as at the subcontractor level of its prime contracts. Moffitt Cancer Center is committed to a comprehensive Supplier Diversity Program that ensures maximum opportunities exist for such diverse businesses.

Supplier Diversity Utilization and Subcontracting Plan - Vendors responding to this solicitation are required to submit a Supplier Diversity Utilization and Subcontracting Plan for diverse supplier opportunity...
and participation of certified MBE/WBE/VBE/SDVBEs with their proposal. The Supplier Diversity Utilization and Subcontracting Plan submitted must include the following:

- Provide Supplier Diversity Utilization and Subcontracting Plan and Description of your Supplier Diversity Program. Supplier Diversity Utilization and Subcontracting Plan and Description of your Supplier Diversity Program submitted: ___Yes ___No

- What percentage of spend with certified MBE/WBE/VBE/SDVBEs is projected for the specific commodity or service outlined in this Request for Proposal (RFP): _________________ (%).

- Outline the plan for achieving 1st tier spend with certified MBE/WBE/VBE/SDVBEs and identify the percentage of spend: _________________ (%).

- Outline the plan for achieving 2nd tier spend with certified MBE/WBE/VBE/SDVBEs and identify the percentage of spend: _________________ (%).

- A list of the certified MBE/WBE/VBE/SDVBEs that will be utilized as 2nd tier subcontract(s) Listing Provided: __________Yes __________No

** Note: Your RFP submittal must include your response that addresses the Supplier Diversity Utilization and Subcontracting Plan outlined above.

** Reports - The successful firm will be required to provide monthly Subcontract Expenditure Reports to Moffitt Cancer Center identifying certified MBE/WBE/VBE/SDVBE participation that lists total payments made to subcontractor(s) until 100% completion/delivery of the specific commodity or services outlined in this RFP finalized. The report shall include the names, addresses, type of service or commodity provided, dollar amount paid, payment date, FEID #, name of certification entity, business classification, and copy of vendor certification for each vendor identified in the report. All Subcontractor Expenditure reports are also required to be turned in with all pay applications/invoices and a copy sent to Desiree Hanson, Manager, Supplier Diversity Program via email Desiree.Hanson@moffitt.org.

- Vendor agrees to provide monthly Subcontract Expenditure Reports with submittal of every pay application/invoice: __________YES __________NO