

Office of the Vice President  
and Chief Financial Officer  
Finance and Accounting Division  
*Purchasing and Disbursement Services*  
<http://purchasing.ufl.edu/>

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352-392-1331  
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July 16, 2009

**REQUEST FOR INFORMATION**

**RFI NO.:** RFI10GD-108

**TITLE:** Picture Archive and Communication System (PACS)

**ESTIMATED BUDGET RANGE:** \$110,000 - \$130,000

Responses must be received by:

**DATE AND TIME:** July 31, 2009, at 2:00 PM

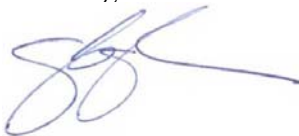
**PLACE:** University of Florida  
Purchasing & Disbursement Services  
Elmore Hall, Radio Road  
Gainesville, Florida 32611

**SCOPE OF WORK:** The University of Florida requests information from companies specializing in Picture Archive and Communication Systems (PACS).

Vendors are requested to submit to Purchasing Services a completed copy of the attached Requirements Spreadsheet. Instructions for completion of the spreadsheet are indicated at the top of the document. Once this information is collected, it will be reviewed in order possibly create a Request for Proposal (RFP) or Invitation to Negotiate (ITN). All information regarding a potential competitive solicitation will be available on the Purchasing website at [www.purchasing.ufl.edu](http://www.purchasing.ufl.edu).

All questions should be forwarded in writing to Gayle Dykeman, Purchasing Coordinator, [gbdykeman@ufl.edu](mailto:gbdykeman@ufl.edu) or faxed to (352) 392-8837. Responses will be posted for review at [www.purchasing.ufl.edu](http://www.purchasing.ufl.edu). For all inquiries, please specify RFI number, RFI title, and Purchasing Coordinator's name on any information submitted.

Sincerely,



Gayle Dykeman  
Purchasing Coordinator

**Picture Archive and Communication System  
Vendor Questionnaire**

- Instructions: 1) Complete the contact information requested at the top of the form.  
 For each item listed, vendor must indicate in the Vendor Response column if Vendor  
 2) product has the capability to perform function described or service requested. Respond with a "Y" for an affirmative response and a "N" if the function or service is not available.  
 3) No additional information is required.

Vendor Name \_\_\_\_\_  
 Vendor Contact Name \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Alternate Phone \_\_\_\_\_  
 e-mail Address \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_

Ref #	Item	Description	Vendor Response
<b>1</b>	<b>Connectivity</b>		
1.1	HL 7 connection to Cornerstone (Idexx)	<ul style="list-style-type: none"> <li>Integration to provide patient demographics for RIS and PACS</li> </ul>	
1.2	HL 7 connection to RIS (Empiric)	<ul style="list-style-type: none"> <li>Integration to provide patient demographics and report distribution including key information such as when a study is activated, complete, preliminary report and finalized dictation</li> </ul>	
1.3	DICOM 3.0 Compatible	<ul style="list-style-type: none"> <li>Must be HL-7 compatible and compliant with current RIS (Empiric) and HIS (Idexx, Cornerstone)</li> </ul>	
1.4	Orthoview	<ul style="list-style-type: none"> <li>Must be DICOM 3.0 Compatible and Compliant</li> </ul>	
1.5	Dental Unit	<ul style="list-style-type: none"> <li>Should be able to receive and display templates from Orthoview including save features back into PACS for future image review</li> </ul>	
1.6	Endoscopy	<ul style="list-style-type: none"> <li>Must be able to store and display dental images (dental machine is DICOM compliant)</li> </ul>	
1.7	Arthroscopy	<ul style="list-style-type: none"> <li>Must be able to store and display video clips and stills of endoscopy (once patient DICOM file has been established)</li> </ul>	
1.8		<ul style="list-style-type: none"> <li>Must be able to store and display video clips and stills of pathology and clinical pathology cytology/histology gross photographs (once patient DICOM file has been established)</li> </ul>	
1.9	Fluoroscopy	<ul style="list-style-type: none"> <li>Must be able to store and display video clips and stills of arthroscopy (once patient DICOM file has been established)</li> </ul>	
1.10	Cath Lab	<ul style="list-style-type: none"> <li>Must be able to store and display video clips from fluoroscopic procedures (once patient DICOM file has been established)</li> </ul>	
1.11	Gamma Camera	<ul style="list-style-type: none"> <li>Must be able to store and display stills and video acquisitions (Fluoro, DSA, above devices, ultrasound, CT, nuclear medicine and MRI)</li> </ul>	
1.12	Ultrasound	<ul style="list-style-type: none"> <li>ROI analysis for CT, NM and MRI (T2 data)</li> </ul>	
1.13	Referring Veterinarian Access	<ul style="list-style-type: none"> <li>Must allow referring doctors to access only their studies from outside the network (see profiles - with security that ensures patient protection)</li> </ul>	
1.14	Teleradiology	<ul style="list-style-type: none"> <li>Must allow UF to receive DICOM images from referring veterinarians without security compromise to UF system or PACS</li> </ul>	

1.15	Report Distribution	<ul style="list-style-type: none"> <li>Must allow for easy distribution of imaging reports via email and fax to referring veterinarians for teleradiology and in house cases as needed</li> </ul>	
1.16		<ul style="list-style-type: none"> <li>Be able to download from RIS the finalized radiology report automatically so that the information for prior images are available for review on demand by user</li> </ul>	
1.17		<ul style="list-style-type: none"> <li>Integration of unique veterinary demographics including, but not limited to, species (equine, canine, feline, etc.), sex (MN, M, FN, F), breed, etc.</li> </ul>	
1.18		<ul style="list-style-type: none"> <li>Easy to learn display tool bar</li> </ul>	
1.19		<ul style="list-style-type: none"> <li>Easy remote access with ease of use for end user without internet glitches - in other words the program works over the internet when accessed remotely</li> </ul>	
1.20		<ul style="list-style-type: none"> <li>Ease of use with easily read worklist and easy access to prior studies and automated display of only select studies that are applicable for review (thorax with latest comparable thorax)</li> </ul>	
1.21		<ul style="list-style-type: none"> <li>Specific CT and MR toolbars with reference lines (automated), thumbnail pop-ups, MPR, 3D with various shells and automated display algorithms (skin, bone, vascular, etc.)</li> </ul>	
1.22		<ul style="list-style-type: none"> <li>3D time to render should be less than 1 to 2 seconds once the data has loaded.</li> </ul>	
1.23		<ul style="list-style-type: none"> <li>MPR and 3D data (including circumferential rotational movies) should be able to be saved out to PACS with appropriate log in admin rights.</li> </ul>	
1.24		<ul style="list-style-type: none"> <li>3D data should be able to exported as .avi, .mov, mpeg or mp4 standard displays with variable degree of compression as needed.</li> </ul>	
<b>2</b>	<b>Teaching</b>		
2.1		<ul style="list-style-type: none"> <li>Easy log in without significant delay in timing related to initial program initialization</li> </ul>	
2.2	Tag Teaching Images	<ul style="list-style-type: none"> <li>Must be Microsoft XP compliant; the ability to access via the internet via multiple programs (explorer, firefox mozilla, safari) and platforms (Vista, Mac, Unix) would be considered a plus</li> </ul>	
2.3		<ul style="list-style-type: none"> <li>Should be able to monitor on line usage - PACS administration</li> </ul>	
2.4		<ul style="list-style-type: none"> <li>Must maintain the ability to keep up to date with current JAVA versions and explorer versions so that compatability with upgrades is not an issue.</li> </ul>	
<b>3</b>	<b>Organize Teaching Images</b>		
3.1	Anonymizing Teaching Images	<ul style="list-style-type: none"> <li>List requirements for on-site archive of 5 years' data. Justify server numbers, size and requirements - Total less than 1 Terrabyte of data currently (Carestream PACS archive)</li> </ul>	
3.2	Image Display for Teaching	<ul style="list-style-type: none"> <li>Off site storage is to be supplied by UF. Must seamlessly integrate with this solution and pull data as needed, particularly in case of a down server</li> </ul>	
3.3		<ul style="list-style-type: none"> <li>Lossless compression only for storage. Send and receive options for readers at home or off site for various degrees of compression.</li> </ul>	
3.4		<ul style="list-style-type: none"> <li>Current estimates are 15,000 cases per year with a total of 5 images (radiology-60%); 35 images and 2 video clips (US-25%); 500 images (MRI); 1000 images (CT); 25 images (NM).</li> </ul>	
3.5		<ul style="list-style-type: none"> <li>Remote 24/7 monitoring of PACS servers with automated response to IT administrators at UF when problems.</li> </ul>	
3.6		<ul style="list-style-type: none"> <li>24/7 technical support including back up servers (cold servers) for major software upgrades.</li> </ul>	
3.7		<ul style="list-style-type: none"> <li>8 to 5 PM phone support for IT, PACS administrators and Radiologists.</li> </ul>	
3.8		<ul style="list-style-type: none"> <li>In house training of radiologists, IT personnel and PACS administrators as part of original pricing (this should include some type of hospital training/manuals for clinicians, and students)</li> </ul>	
3.9	Teaching Image URL	<ul style="list-style-type: none"> <li></li> </ul>	
<b>4</b>	<b>Hardware: Archive</b>		

4.1	On-site archive	<ul style="list-style-type: none"> <li>Please provide ALL requirements for a workstation running 5 monitors, PACS, RIS and Voice Recognition software (Dragon Naturally Speaking)</li> </ul>	
4.2	Integration with UF off-site storage	<ul style="list-style-type: none"> <li>Will be running 10 major work stations initially which will include a variety of monitors for review and a monitor for display of RIS and worklist</li> </ul>	
4.3		<ul style="list-style-type: none"> <li>Must allow for a profile to follow the user to different workstations. Profiles should be able to be formatted easily from templates or other users. Can only manipulate own profiles.</li> </ul>	
4.4	Compression	<ul style="list-style-type: none"> <li></li> </ul>	
<b>5</b>	<b>Hardware: Workstations</b>		
5.1		<ul style="list-style-type: none"> <li>Must allow for easy labeling and subsequent display of key images in a study. Should be able to store key images without problems back to PACS.</li> </ul>	
5.2	Workstation requirements	<ul style="list-style-type: none"> <li>Must allow for referring veterinarian access to only specific cases with labeled key images based on their log on features and their current hospital or referral cases. Should be time sensitive.</li> </ul>	
5.3		<ul style="list-style-type: none"> <li>Must allow unlimited number of SW licenses for log-in to the system and provide various levels of administration (student, intern, resident, clinician, radiologist, PACS administrator, IT support)</li> </ul>	
<b>6</b>	<b>Profiles</b>		
6.1	Roaming	<ul style="list-style-type: none"> <li></li> </ul>	
6.2	Role-based	<ul style="list-style-type: none"> <li>Easily distributed to Hospital PCs for image viewing in all areas and at home with automated software updates</li> </ul>	
6.3	Unlimited licenses	<ul style="list-style-type: none"> <li>Additional PCs can easily download required software from Server in a quick and seamless fashion without significant configuration</li> </ul>	
6.4		<ul style="list-style-type: none"> <li>Easily modified Hanging Protocols that can be shared between users and groups (eg: within radiologists)</li> </ul>	
<b>7</b>	<b>Software</b>		
7.1		<ul style="list-style-type: none"> <li>Programmable Hot Keys, Customizable display, thumbnail display, standard measurement features and tools including measurement, angles and ROI analysis</li> </ul>	
7.2	Thin client	<ul style="list-style-type: none"> <li>Must easily and quickly display clips of US, Fluoro, NM, DSA</li> </ul>	
7.3	Server residing and distributed	<ul style="list-style-type: none"> <li>Must be able to easily export still images for teaching purposes (Power Point, Keynote, etc.) - DICOM, .jpeg, TIF and bmp formats</li> </ul>	
7.4	Hanging protocols	<ul style="list-style-type: none"> <li>Must be able to easily export video clips for teaching purposes (Power Point, Keynote, etc.) - DICOM, mpeg, .mov, .avi, mp4 with compression capabilities</li> </ul>	
7.5	Display tools	<ul style="list-style-type: none"> <li>Must include rendering software, including MIP, angio, and 3D. This should be incorporated into the primary PACS program and should integrate seamlessly.</li> </ul>	
7.6	Display of clips	<ul style="list-style-type: none"> <li>Must comply with UF OS requirements and recommendations - will provide these documents when required.</li> </ul>	
7.7	Export JPEG, TIFF, BMP	<ul style="list-style-type: none"> <li>Must have compression options for off-site review on slower internet connections with automated download features for "on call" radiologist.</li> </ul>	
7.8	Export of clips (AVI, MPEG, WAV)	<ul style="list-style-type: none"> <li></li> </ul>	
7.9	3D rendering software included	<ul style="list-style-type: none"> <li></li> </ul>	
7.10	OS/Browser requirements	<ul style="list-style-type: none"> <li>Different options to fit UF needs and financial requirements</li> </ul>	
7.11	Compression of streaming images	<ul style="list-style-type: none"> <li>Standard support must be included. Add'l fees for service outside agreed times is expected</li> </ul>	
7.12		<ul style="list-style-type: none"> <li>Training for PACS administrator(s)</li> </ul>	
<b>8</b>	<b>Support and Updates</b>		
8.1	8 am - 5 pm with option for 24- 7	<ul style="list-style-type: none"> <li>All software updates must be available to customers as a part of service contract agreement during the time under contract</li> </ul>	

8.2		<ul style="list-style-type: none"> <li>Additional software upgrades that represent substantially new product support must be provided at a minimum of a 40% discount to UF while under service agreement</li> </ul>	
8.3	Included in Service Contract	<ul style="list-style-type: none"> <li></li> </ul>	
8.4	Training for Super Users	<ul style="list-style-type: none"> <li>Must NOT charge per modality for later addition of equipment - unlimited equipment hook up for DICOM equipment and other .jpeg and .avi sources for medical record storage</li> </ul>	
8.5	Software Updates Included in service	<ul style="list-style-type: none"> <li>Must provide appropriate technical support for the addition of DICOM compliant equipment, including initial review of DICOM data as sent from new devices.</li> </ul>	
<b>9</b>	<b>Modalities</b>		
9.1		<ul style="list-style-type: none"> <li>Approximately 1 TB of data is to be migrated to the new system within 3 months of implementation</li> </ul>	
9.2	Unlimited ability to connect additional modalities	<ul style="list-style-type: none"> <li></li> </ul>	
<b>10</b>	<b>Migration</b>		
10.1	Migration of all Carestream Data	<ul style="list-style-type: none"> <li></li> </ul>	