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Materials List for

A Coregistered Ultrasound and Photoacoustic Imaging Protocol for the Transvaginal Imaging of Ovarian Lesions

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Materials

Name	Company	Catalog Number	Comments
Clinical US imaging system	Alpinion Medical Systems	EC-12R	Fully programmable clinical US system
Dielectric mirror	Thorlabs	BB1-E03	Used to reflect light along the optical path
Endocavity US transducer	Alpinion Medical Systems	EC3-10	Transvaginal ultrasound probe
Laser power meter	Coherent	LabMax TOP	Used to measure laser energy
Multi-mode optical fiber	Thorlabs	FP1000ERT	Couple laser light to the endocavity ultrasound probe
Non-polarizing beam splitter plate	Thorlabs	BSW11	For splitting laser beam into sensors to measure energy
Plano-concave lens	Thorlabs	LC1715	For laser beam expansion
Plano-convex lens	Thorlabs	LA1484-B	For laser beam collimation
Plano-convex lens	Thorlabs	LA1433-B	Used to focus light into four optical fibers
Polarizing beam splitter cube	Thorlabs	PBS252	For splitting laser beam into four beams
Protective probe shealth	Custom 3D printed		Hold and protect the four optical fibers at the tip of the ultrasound probe
Right angle prism mirror	Thorlabs	MRA25-E03	Used to reflect light along the optical path
Tunable laser system	Symphotic TII	LS-2145-LT50PC	Light source for multispectral PAT
USPAT control software	Custom developed in C++		Controls acquisition parameters of the ultrasound machine and the laser wavelength
USPAT image display software	Custom developed in C++		Displays the US/PAT B-scans and sO2/rHbT maps in real time