

CLAIMS

1. A drape, comprising:

a drape body, wherein the drape body is configured to limit passage of electromagnetic radiation through the drape body to an interior imaging environment defined by the drape body such that electromagnetic radiation within the interior imaging environment does not exceed a predetermined threshold; and

a connecting element permanently coupled to the drape body and defining a hole in the drape body, the connecting element being configured to attach the drape to an imaging device.

2. The drape of claim 1, wherein an amount of electromagnetic radiation above the predetermined threshold is an amount of electromagnetic radiation known to interfere with fluorescence and white light imaging.

3. The drape of claim 1 or claim 2, wherein the connecting element further comprises at least one support structure.

4. The drape of claim 3, wherein the at least one support structure is positioned on an interior surface of the drape.

5. The drape of claim 3 or claim 4, wherein the at least one support structure is configured to support a portion of the drape body, surrounding the connecting element, when the drape is in a deployed configuration such that the portion of the drape extends in a planar fashion from the connecting element to a first shaping structure of the drape.

6. The drape of any one of claims 3-5, wherein the at least one support structure comprises a plurality of support structures.

7. The drape of any one of claims 3-6, wherein the plurality of support structures extend radially outward or circumferentially from a frame of the connecting element.
8. The drape of any one of claims 3-7, wherein the at least one support structure is a finger element.
9. The drape of claim 8, wherein the at least one support structure includes a plurality of finger elements extending from a frame of the connecting element.
10. The drape of any one of claims 3-9, wherein the at least one support structure is flexible.
11. The drape of any one of claims 5-10, wherein the portion of the drape body extending to the first shaping element is substantially circular.
12. The drape of any one of claims 5-11, wherein the first shaping element is a flexible structure embedded in the drape body.
13. The drape of any one of claims 5-12, wherein the first shaping element is configured to maintain a shape of the drape body in the deployed configuration.
14. The drape of any one of claims 5-13, wherein the first shaping element is configured to cooperate with the at least one support structure to hold the drape body out of a field of view of the imaging device.
15. The drape of any one of claims 5-14, wherein the first shaping element is further configured to change a shape of the drape in response to user manipulation and to maintain the change of shape after release by a user.
16. The drape of any one of claims 1-15, further comprising at least one valve configured to permit air flow into the drape during deployment of the drape.

17. The drape of claim 16, wherein the at least one valve is a one-way valve configured to prevent air from escaping from the interior imaging environment after deployment of the drape.
18. The drape of any one of claims 1-17, wherein the drape has a substantially circular shape in an undeployed configuration.
19. The drape of claim 18, wherein the drape has a substantially cylindrical shape in a deployed configuration.
20. The drape of claim 18, wherein the drape has a truncated-cone shape in a deployed configuration.
21. The drape of any one of claims 5-20, further comprising a second shaping element.
22. The drape of claim 21, wherein the second shaping element has a substantially circular shape.
23. The drape of claim 22, wherein the second shaping element is positioned radially outward from the first shaping element when the drape is in the undeployed configuration.
24. The drape of any one of claims 1-23, wherein the connecting element comprises a frame.
25. The drape of claim 24, wherein the hole in the drape body is formed in the frame of the connecting element.
26. The drape of claim 25, wherein the frame is substantially rectangular in shape.

27. The drape of any one of claims 1-26, wherein a hole in the drape body is shaped and sized to receive a portion of the imaging device containing a light source and a lens.
28. The drape of claim 27, wherein the hole is substantially kidney shaped.
29. The drape of any one of claims 1-28, wherein the connecting element further comprises clips configured to attach to the imaging device.
30. The drape of claim 29, wherein the clips are movable between an open position and a closed position.
31. The drape of claim 30, further comprising a cover portion configured to sit between the hole in the drape body and the clips.
32. The drape of claim 31, wherein the clips are configured to move to the open position during removal of the cover portion.
33. The drape of any one of claims 1-32, wherein, when in a deployed configuration, the drape includes a top portion that extends substantially radially around the connecting element and a skirt portion that extends vertically from a perimeter of the top portion of the drape.
34. The drape of claim 33, wherein the skirt portion is flexible.
35. The drape of claim 33, wherein the skirt portion is substantially rigid.
36. The drape of any of claims 33-36, wherein a bottom of the skirt portion includes one or more fixing elements configured to fix the bottom of the skirt portion of the drape relative to an area to be imaged, such that the area to be imaged is positioned or contained within the interior imaging environment of the drape.

37. The drape of claim 36, wherein the one or more fixing elements include at least one of a weighted element, a magnet, a draw string, tape, a wire, and a hook and loop closure.
38. The drape of any one of claims 1-37, wherein the drape comprises at least one of a plastic material, a paper material, a vinyl material, a cloth material.
39. The drape of claim 38, wherein the drape further comprises a coating configured to limit passage of electromagnetic radiation.
40. The drape of claim 38 or claim 39, wherein an interior surface of the drape which defines the interior imaging environment is coated with a material to reduce reflection within the interior imaging environment.
41. A system for fluorescence-based imaging of a target, comprising:
- the drape of claim 1; and
 - a portable, handheld imaging device, wherein the imaging device includes a portion with a lens and at least one violet light source, and wherein the connecting element is configured to encompass an area surrounding the lens and the at least one light source to position the light source within the interior space of the drape body.
42. The system of claim 41, further comprising a shield disposed over the imaging device.
43. The system of claim 42, wherein the shield is a polymer material.
44. A drape, comprising:
- a drape body configured to move between a closed configuration and an open configuration, wherein the drape body is substantially planar in the closed configuration

and in the open configuration, the drape body has a shape that is substantially cylindrical, substantially rectangular, a truncated cone, or a truncated pyramid;

a connecting element coupled to the drape body and configured to attach the drape to a portable, handheld imaging device; and

at least one valve configured to pass air into the drape as the drape moves from the closed configuration to the open configuration.

45. The drape of claim 42, further comprising at least one shaping element configured to hold the drape in the open configuration.

46. The drape of claim 43, wherein the at least one shaping element is configured to hold the drape out of a field of view of an imaging device connected to the drape when the drape is in the open configuration.

47. The drape of claim 43 or claim 44, wherein the at least one shaping element is configured to maintain the drape in the closed configuration prior to deployment of the drape into the open configuration.

48. The drape of any one of claims 43-45, wherein the at least one shaping element comprises a plurality of shaping elements.

49. The drape of any one of claims 43-46, wherein the plurality of shaping elements is configured to permit a user to change a shape of the drape when in the open configuration.

50. The drape of claim 47, wherein the shape of the drape may be configured to conform to a shape of a part to be imaged.

51. The drape of claim 48, wherein the plurality of shaping elements maintain the drape in the changed shape.

52. The drape of any one of claims 43-49, wherein the at least one shaping element is a wire.
53. The drape of claim 50, wherein the wire is embedded in the drape body.
54. The drape of any one of claims 43-51, wherein the connecting element comprises a frame portion having an opening configured to receive a portion of the imaging device and a plurality of connectors configured to releasably engage the imaging device.
55. The drape of claim 52, wherein the opening is configured to sealingly engage the imaging device to prevent passage of electromagnetic radiation through the opening into an interior of the drape.
56. The drape of any one of claims 43-53, wherein the drape comprises a material configured to limit the passage of electromagnetic radiation through the drape body to create an imaging environment within the drape.
57. The drape of any one of claims 42-54, wherein an interior surface of the drape is sterile.
58. The drape of any one of claims 42-55, wherein the drape comprises a black material.
59. The drape of any one of claims 42-56, wherein the drape comprises at least one of a plastic material, a cloth material, a vinyl material, a rubber material, and a paper material.
60. The drape of claim 57, wherein the drape comprises a plastic film.
61. The drape of claim 58, wherein the drape comprises a polyethylene film or a polyolefin film.

62. The drape of any one of claims 42-59, wherein an interior surface of the drape has a matte finish.

63. The drape of any one of claims 42-60, wherein the interior surface of the drape forms a non-reflective surface.

64. The drape of any one of claims 42-61, wherein, when the drape is in the open configuration, the drape body is substantially rigid.

65. The drape of any one of claims 42-61, wherein, when the drape is in the open configuration, the drape body is flexible.

66. A method of creating a portable imaging environment, comprising:

- positioning a portable, handheld imaging device relative to an opening of a darkening drape while the drape is in a collapsed condition;

- connecting a frame of the drape to the imaging device; and

- moving the imaging device and connected drape away from a packaging element supporting the drape in the collapsed condition.

67. The method of claim 64, wherein moving the imaging device and connected drape away from the packaging element includes passing air through at least one vent of the drape into an interior of the drape.

68. The method of claim 64 or claim 65, wherein positioning an imaging device relative to an opening of a darkening drape includes creating a seal between a portion of the imaging device and the opening of the drape to limit electromagnetic radiation from passing into the interior of the drape through the opening.

69. The method of any one of claims 64-66, wherein connecting the frame of the drape to the imaging device comprises securing one or more connectors of the frame to the imaging device.
70. The method of any one of claims 64-67, wherein moving the imaging device and connected drape away from the packaging element includes expanding the drape from the collapsed condition to an expanded condition.
71. The method of claim 68, wherein expanding the drape from the collapsed condition to the expanded condition includes moving the drape from a substantially planar shape to one of a substantially cylindrical shape, a substantially rectangular shape, a truncated-cone shape, and a truncated pyramidal shape.
72. The method of claim 68 or claim 69, wherein expanding the drape from the collapsed condition to the expanded condition includes moving the drape away from the packaging element until at least one shaping element of the drape releases from the packaging element.
73. The method of claim 70 wherein expanding the drape from the collapsed condition to an expanded condition includes moving the drape away from the packaging element until a plurality of shaping elements of the drape release from the packaging element.
74. The method of claim 71, wherein the plurality of shaping elements release from the packaging element successively.
75. The method of claim 71, wherein the plurality of shaping elements release from the packaging element substantially simultaneously.
76. The method of any one of claims 64-73, further comprising positioning the expanded drape over a part to be imaged.

77. The method of any one of claims 64-74, further comprising adjusting a shape of the drape to conform to a part to be imaged.

78. The method of claim 75, wherein adjusting a shape of the drape to conform includes manipulating at least one shaping element of the drape to conform to a contour of the part to be imaged.

79. The method of any one of claims 64-76, further comprising, when the drape is in the expanded condition, supporting a portion of the drape surrounding the opening to maintain the portion of the drape in a position outside of a field of view of the imaging device.

80. The method of any one of claims 64-77, further comprising positioning a bottom portion of the drape around a part to be imaged in a draped fashion such that the bottom of the drape limits passage of electromagnetic radiation into an interior space defined by the expanded drape, the interior space forming a darkened imaging environment.

81. The method of any one of claims 64-78, further comprising using the imaging device to obtain a fluorescent image or fluorescent video of a part to be imaged within the darkened imaging environment.

82. The method of any one of claims 64-79, further comprising using the imaging device to obtain a white light image or a white light video of a part to be imaged within the darkened imaging environment.

83. A method of obtaining a fluorescence-based image or video without changing ambient lighting conditions, comprising:

removing a cover from an opening of a darkening drape;

attaching an imaging device to the drape while the drape is connected to a packaging element; and

moving the imaging device and attached drape away from the packaging element to deploy the drape;

positioning an open, bottom end of the drape over an area of a body to be imaged;

contouring a portion of the drape around the body area to be imaged to create a darkened imaging environment around the body area to be imaged, wherein the drape is configured to limit passage of ambient light through the drape into the darkened imaging environment; and

capturing a fluorescent image or a fluorescent video of the body area with the imaging device attached to the drape.

84. The method of claim 81, further comprising using a sensor of the imaging device to verify that the darkened imaging environment within the drape satisfies fluorescent imaging requirements.

85. The method of claim 81 or claim 82, wherein removing a cover from an opening of a darkening drape moves one or more connecting mechanisms into an open position to receive the imaging device while maintaining a sterile condition of an interior of the drape.

86. The method of any one of claims 81-83, wherein attaching an imaging device to the drape while the drape is connected to a packaging element includes aligning a lens portion of the imaging device with a hole in the drape, the hole being formed in a connecting frame of the drape.

87. The method of claim 84, wherein attaching an imaging device to the drape while the drape is connected to a packaging element further comprises sealingly attaching the lens portion of the imaging device to the connecting frame in a manner that prevents the passage of ambient light through the hole in the drape.

88. The method of any one of claims 81-85, wherein capturing a fluorescent image or a fluorescent video of the body area with the imaging device attached to the drape includes illuminating the body area to be imaged with light from at least one violet LED.

89. The method of claim 86, wherein the at least one violet LED is positioned on the lens portion of the imaging device aligned with a hole in the drape.

90. The method of any one of claims 81-87, further comprising maintaining a clear field of view of the imaging device during imaging.

91. The method of claim 88, wherein maintaining a clear field of view includes supporting an area of the drape surrounding the hole in the drape to keep the field of view clear.

92. The method of claim 88 or claim 89, wherein maintaining a clear field of view includes supporting, at least one point along a length of the drape, a circumference or a perimeter of the drape to keep the field of view clear.

93. The method of claim 89, wherein supporting an area of the drape surrounding the hole in the drape includes supporting the drape with a plurality of support elements extending radially from the connecting frame.

94. The method of claim 90, wherein supporting a circumference or a perimeter of the drape, along a length of the drape, includes supporting the circumference or perimeter of the drape with a flexible element embedded around the perimeter of the drape.

95. The method of claim 92, wherein the flexible element embedded around the perimeter is at least one wire.
96. The method of any one of claims 81-93, further comprising, subsequent to capturing a fluorescent image or a fluorescent video of the body area with the imaging device attached to the drape, removing the drape from the body area.
97. The method of claim 94, further comprising removing the imaging device from the drape.
98. The method of claim 95, wherein removing the imaging device from the drape includes releasing one or more connecting mechanisms connected to a body of the imaging device.
99. The method of any one of claims 81-94, further comprising capturing a white light image or a white light video of the body area with the imaging device attached to the drape.
100. A dispensing element configured to store a darkening drape, comprising:
a substantially planar base portion; and
at least one restraining element configured to engage a shaping element of a darkening drape.
101. The dispensing element of claim 98, wherein the at least one restraining element is positioned centrally on the planar base portion.
102. The dispensing element of claim 98 or claim 99, wherein the at least one restraining element has a height that extends upward from the planar base portion.
103. The dispensing element of any one of claims 98-100, wherein the at least one restraining element is a ring extending upward from the planar base portion.

104. The dispensing element of any one of claims 98-101, wherein the at least one restraining element comprises at least two restraining elements, and wherein the at least two restraining elements are concentrically positioned on the planar base portion.

105. The dispensing element of any one of claims 98-102, wherein the at least one restraining element is a ring, the ring being circular or polygonal in shape.

106. The dispensing element of any one of claims 98-103, wherein the planar base portion is formed of cardboard, rubber or plastic.

107. The dispensing element of any one of claims 98-104, wherein the at least one restraining element is formed of cardboard, plastic, or rubber.

108. A darkening drape system, comprising:

a darkening drape comprising:

a drape body, wherein the drape body is configured to limit passage of ambient light through the drape body to an interior imaging environment defined by the drape body,

a frame configured to attach the drape to an imaging device, and

at least one shaping element configured to maintain the drape in a position outside a field of view of the imaging device during imaging; and

a drape dispensing element comprising:

a substantially planar base portion; and

at least one restraining element configured to engage the at least one shaping element of the darkening drape.

109. The system of claim 106, wherein an interior of the drape body is maintained in sterile condition against the base portion of the dispensing element.

110. The system of claim 106 or claim 107, wherein the at least one shaping element of the drape is a wire, the wire having a shape that is circular or polygonal.

111. The system of claim 108, wherein the at least one restraining element is a ring element, the ring element having a shape that is circular or polygonal.

112. The system of any one of claims 106-109, wherein the at least one shaping element is configured to fit within the at least one restraining element.

113. The system of claim 110, wherein the drape comprises at least two shaping elements and the dispensing element comprises at least two restraining elements, the restraining elements being positioned concentrically on the base portion of the dispensing element.

114. The system of claim 110 or claim 111, wherein each of the two shaping elements and each of the two restraining elements are circular in shape.

115. The system of claim 110 or claim 111, wherein each of the two shaping elements and each of the two restraining elements are polygonal in shape.

116. The system of any one of claims 106-109, wherein the at least one restraining element is configured to fit within the at least one shaping element.

117. The system of claim 114, wherein the drape comprises at least two shaping elements and the dispensing element comprises at least two restraining elements, the restraining elements being positioned concentrically on the base portion of the dispensing element.

118. The system of claim 114 or claim 115, wherein each of the two shaping elements and each of the two restraining elements are circular in shape.

119. The system of claim 114 or claim 115, wherein each of the two shaping elements and each of the two restraining elements are polygonal in shape.

120. The system of any one of claims 106-117, wherein the at least one shaping element of the drape and the at least one restraining element of the dispensing element are configured to cooperate to facilitate deployment of the drape.

121. The system of claim 118, wherein the drape further comprises at least one vent configured to prevent creation of a vacuum within the drape as the drape is pulled away from the base portion of the dispensing element.

122. The system of any one of claims 106-119, wherein the drape body is further configured to limit passage of electromagnetic radiation other than ambient light through the drape body to the interior imaging environment defined by the drape body.

123. The system of any one of claims 106-120, wherein the drape comprises at least one of a plastic material, a rubber material, a paper material, a vinyl material, and a cloth material.

124. A method of obtaining a measurement of a target without changing ambient lighting conditions, comprising:

removing a cover from an opening of a darkening drape;

attaching an imaging device to the drape while the drape is connected to a packaging element; and

moving the imaging device and attached drape away from the packaging element to deploy the drape;

positioning an open, bottom end of the drape over an area of a body containing the target to be measured;

contouring a portion of the drape around the body area containing the target to be imaged to create a darkened environment around the body area containing the target to be measured, wherein the drape is configured to limit passage of electromagnetic radiation through the drape into the darkened environment; and

measuring the target on the body area with a portable, handheld imaging device attached to the drape.

125. The method of claim 122, wherein the target is a wound, a lesion, a cut, an incision, or a tumor.

126. The method of claim 122 or claim 123, wherein measuring the target includes viewing a white-light image of the target on a screen of the imaging device.

127. The method of any of claims 122-124, further comprising capturing a white-light image of the target while the body area is in the darkened environment.

128. The method of any of claims 122-125, further comprising capturing a fluorescent image of the target while the body area is in the darkened environment.

129. The drape of any one of claims 1-41, wherein the drape is configured for single-use and is disposable.

130. The drape of any one of claims 41-63, wherein the drape is configured for single-use and is disposable.

131. A drape, comprising:

a drape body, wherein the drape body is configured to limit passage of ambient light through the drape body to an interior imaging environment defined by the drape body; and

a connecting element coupled to the drape body and defining a hole in the drape body, the connecting element including a planar surface and fingers that project outwardly from the planar surface, and the fingers being configured to attach the drape to an imaging device.

132. A drape, comprising:

a drape body, wherein the drape body is configured to limit passage of ambient light through the drape body to an interior imaging environment defined by the drape body; and

a retaining feature coupled to the drape body and being configured to attach the drape to an imaging device.

133. The drape of claim 132, wherein the retaining feature further comprises a support ring.

134. The drape of claim 133, wherein the retaining feature is positioned on an exterior surface of the drape.

135. The drape of any one of claims 132-134, wherein the retaining feature is configured to mate with a circumferential groove on the imaging device.

136. The drape of any one of claims 132-135, wherein the retaining feature defines an opening in the drape.

137. The drape of any one of claims 132-136, wherein the retaining feature extends radially outward from the drape.

138. The drape of any one of claims 132-137, wherein the drape comprises at least one of a plastic material, a paper material, a vinyl material, a cloth material.

139. The drape of claim 138, wherein the drape further comprises a coating configured to limit passage of electromagnetic radiation.

140. The drape of claim 138 or claim 139, wherein an interior surface of the drape which defines the interior imaging environment is coated with a material to reduce reflection within the interior imaging environment.

141. A system for fluorescence-based imaging of a target, comprising:

the drape of claim 132; and

a portable, handheld imaging device, wherein the imaging device includes a portion with a lens and at least one violet light source, and wherein the connecting element is configured to encompass an area surrounding the lens and the at least one light source to position the light source within the interior space of the drape body.

142. An imaging drape, comprising:

a drape body, wherein the drape body is configured to limit passage of ambient light through the drape body to a portable imaging environment defined by the drape body or alter a characteristic of ambient light passing through the drape body to the portable imaging environment;

a connecting element configured to attach the drape to an imaging device; and

at least one shaping element configured to maintain the drape in a position outside a field of view of the imaging device during imaging.

143. An imaging drape, comprising:

a drape body defining a portable imaging environment, wherein the drape body is configured to limit ambient and/or visible light within the portable imaging environment to less than about 402 mW/m².

144. The drape of claim 143, further comprising a connecting element configured to attach the drape to an imaging device.
145. The drape of claim 144, wherein the connecting element comprises a support ring that protrudes radially outward from a top surface of the drape body.
146. The drape of claim 145, wherein the support ring is configured to be coupled with a shield that is disposed on the imaging device to attach the drape to the imaging device.
147. The drape of claim 146, wherein the support ring is configured to be coupled to the shield through a male-female locking mechanism.
148. The drape of any one of claims 144-146, wherein the connecting element comprises one or more projections that are configured to prevent the drape body from moving into the imaging environment when the drape is in a deployed configuration.
149. The drape of any one of claims 144-147, wherein the connecting element comprises grasping elements that are configured to secure the imaging device to the drape.
150. The drape of claim 149, wherein the grasping elements are configured to rotate in a range of motion of about 90 degrees from an open configuration to a closed configuration.
151. The drape of any one of claims 144-150, wherein the connecting element comprises a one-way valve that is configured to provide air movement from outside the drape to within an interior of the drape to create a higher air pressure within the interior of the drape relative to the exterior of the drape.

152. The drape of any one of claims 143-151, further comprising at least one shaping element configured to maintain the drape in a position outside a field of view of the imaging device during imaging.

153. The drape of any one of claims 143-152, further comprising a fixing element that is configured to closely adhere the drape body to contours of a patient.

154. The drape of claim 153, wherein the fixing element is a magnet configured to be magnetically attracted to magnets on the patient.

155. The drape of claim 153, wherein the fixing element is a weighed element, tape, wire, a hook, and/or a loop closure.

156. The drape of claim 153, wherein the fixing element is a drawstring, a hook and loop closure, or a snap, that is configured to reduce a diameter of a bottom portion of the drape body.

157. The drape of any one of claims 143-156, wherein the drape comprises at least one of a plastic material, a paper material, a vinyl material, a cloth material.

158. The drape of claim 157, wherein the drape further comprises a coating configured to limit passage of electromagnetic radiation.

159. The drape of claim 157 or claim 158, wherein an interior surface of the drape, which defines the imaging environment, is coated with a material to reduce reflection within the imaging environment.

160. A kit comprising:
the drape of any one of claims 1-40, 44-63, and 129-159; and
a compound configured to induce porphyrins in cancerous tissue cells.

161. The kit of claim 160, wherein the compound is a non-activated, non-targeted contrast agent, a single mode contrast agent, or a multi-modal contrast agent.
162. The kit of claim 161, wherein the compound is 5-aminolevulinic acid.
163. The kit of claim 162, further comprising a portable, handheld imaging device.
164. The kit of claim 163, wherein the portable, handheld imaging device includes an excitation light source.
165. The kit of claim 164, wherein the excitation light source is configured to emit excitation light having a wavelength of between about 400 nm and about 450 nm, about 450 nm to about 500 nm, about 500 nm to about 550 nm, about 600 nm to about 650 nm, about 650 nm to about 700 nm, about 700 nm to about 750 nm, and/or about 750 nm to about 900 nm.
166. The kit of claim 165, wherein the excitation light source is configured to emit excitation light having a wavelength of about 400 nm to about 450 nm.
167. The kit of claim 166, wherein the excitation light source is configured to emit excitation light having a wavelength of about 405 nm $\pm$ 10 nm.
168. The kit of any one of claims 163-167, wherein the handheld imaging device is configured to have a plurality of excitation light sources, each light source configured to emit excitation light having a different wavelength.
169. The kit of claim 168, wherein the handheld imaging device includes a first excitation light source that emits a first excitation light having a wavelength between about 375 nm and about 430 nm or of about 405 nm and a second excitation light source that emits a second excitation light having a wavelength between about 550 nm and about 600 nm or of about 572 nm.
170. The kit of claim 169, wherein the handheld imaging device further includes a third excitation light source that emits a third excitation light having a wavelength between about 700 nm and about 850 nm, between about 760 nm and about 800 nm, or of about 760 nm.

171. The kit of any one of claims 163-170, wherein the handheld imaging device includes a filter configured to permit passage of signals emitted by bacteria, bacterial components, tissues, tissue components, and/or porphyrins induced in cancerous tissue or tumors, responsive to illumination with the excitation light, through the filter to an image sensor of the handheld imaging device.

172. The kit of claim 171, wherein the filter is configured to permit passage of signals having wavelengths from about 450 nm to about 500 nm, about 500 nm to about 550 nm, about 550 nm to about 600 nm, about 600 nm to about 660 nm, and/or about 660 nm to about 710 nm.

173. The kit of any one of claims 163-172, wherein the handheld imaging device further comprises a white light source for white light imaging.

174. The kit of claim 173, wherein the excitation light source and a lens of the imaging device are positioned on an imaging head of the imaging device.

175. The kit of claim 174, wherein the imaging head further includes the white light source.

176. The kit of claim 173 or claim 174, wherein the drape includes a connecting element that is configured to receive the imaging head.

177. The kit of claim 176, wherein the connecting element is configured to sealingly engage the imaging head.

178. A kit, comprising:

the drape of any one of claims 1-40, 44-63, and 129-159; and

a portable, handheld imaging device configured to connect to the drape.

179. The kit of claim 178, wherein the portable, handheld imaging device includes an excitation light source.

180. The kit of claim 179, wherein the excitation light source is configured to emit excitation light having a wavelength of between about 400 nm and about 450 nm, about 450

nm to about 500 nm, about 500 nm to about 550 nm, about 600 nm to about 650 nm, about 650 nm to about 700 nm, about 700 nm to about 750 nm, and/or about 750 nm to about 900 nm.

181. The kit of claim 180, wherein the excitation light source is configured to emit excitation light having a wavelength of about 400 nm to about 450 nm.

182. The kit of claim 181, wherein the excitation light source is configured to emit excitation light having a wavelength of about $405 \text{ nm} \pm 10 \text{ nm}$.

183. The kit of any one of claims 178-182, wherein the handheld imaging device is configured to have a plurality of excitation light sources, each light source configured to emit excitation light having a different wavelength.

184. The kit of claim 183, wherein the handheld imaging device includes a first excitation light source that emits a first excitation light having a wavelength between about 375 nm and about 430 nm or of about 405 nm and a second excitation light source that emits a second excitation light having a wavelength between about 550 nm and about 600 nm or of about 572 nm.

185. The kit of claim 184, wherein the handheld imaging device further includes a third excitation light source that emits a third excitation light having a wavelength between about 700 nm and about 850 nm, between about 760 nm and about 800 nm, or of about 760 nm.

186. The kit of any one of claims 178-185, wherein the handheld imaging device includes a filter configured to permit passage of signals emitted by bacteria, bacterial components, tissues, tissue components, and/or porphyrins induced in cancerous tissue or tumors, responsive to illumination with the excitation light, through the filter to an image sensor of the handheld imaging device.

187. The kit of claim 186, wherein the filter is configured to permit passage of signals having wavelengths from about 450 nm to about 500 nm, about 500 nm to about 550 nm, about 550 nm to about 600 nm, about 600 nm to about 660 nm, and/or about 660 nm to about 710 nm.

188. The kit of any one of claims 178-187, wherein the handheld imaging device further comprises a white light source for white light imaging.
189. The kit of claim 188, wherein the excitation light source and a lens of the imaging device are positioned on an imaging head of the imaging device.
190. The kit of claim 189, wherein the imaging head further includes the white light source.
191. The kit of claim 189 or claim 190, wherein the drape includes a connecting element that is configured to receive the imaging head.
192. The kit of claim 191, wherein the connecting element is configured to sealingly engage the imaging head.
193. The kit of any one of claims 178-192, further comprising one or more imaging agents.
194. The kit of claim 193, wherein the one or more imaging agents include a compound configured to induce porphyrins in cancerous tissue cells.
195. The kit of claim 194, wherein the compound is a non-activated, non-targeted contrast agent, a single mode contrast agent, or a multi-modal contrast agent.
196. The kit of claim 195, wherein the compound is 5-aminolevulinic acid.