What is claimed is:

1. A well plate cover comprising:

a base defining a base plane; and

a plurality of insertion elements, wherein

at least a portion of each of the insertion elements is transparent,

each of the insertion elements (i) is coupled to the base, and (ii) extends, in a direction orthogonal to the base plane, from the base to a distal end surface of the insertion element,

the distal end surface of each of the insertion elements includes an apex that, when the respective insertion element is inserted into a well of a well plate, extends further into the well than any other portion of the distal end surface, and

the apex is an apex plane having a diameter that is less than one half of a maximum diameter of the distal end surface;

the apex plane of each of the distal end surfaces forms a circle; and

the distal end surface of each of the insertion elements includes a plurality of planar tiers forming concentric rings around the respective apex plane and sized to fit into the well, with each successive planar tier, when progressing outwardly from the apex plane towards a perimeter of the distal end surface, is closer to the base than is the previous planar tier.

2. The well plate cover of claim 1, wherein at least a portion of each insertion element is at least one of coated and treated with a hydrophilic surface.

3. A method for imaging a fluid sample in a vessel, the method comprising:

inserting at least a distal end surface of an insertion element into the fluid sample in the vessel,

wherein at least a portion of the insertion element is transparent,

wherein the distal end surface includes an apex that extends further into the vessel than any other portion of the distal end surface, and

wherein the apex is an apex plane having a diameter that is less than one half of a maximum diameter of the distal end surface;

wherein:

the apex plane forms a circle;

the insertion element includes a proximal end opposite the distal end surface;

the distal end surface includes a plurality of planar tiers forming concentric rings around the apex plane and sized to fit into the well; and

each successive planar tier, when progressing outwardly from the apex plane towards a perimeter of the distal end surface, is closer to the proximal end of the insertion element than is the previous planar tier;

positioning the vessel in an optical path of an imager;

illuminating the vessel while the insertion element is inserted into the fluid sample in the vessel; and

capturing, by the imager, an image of the illuminated vessel while the insertion element is inserted into the fluid sample in the vessel.

4. The method of claim 3, wherein at least a portion of each insertion element is at least on of coated and treated with a hydrophilic surface.