

Petri's Famous Plate

The origin of the familiar Petri dish



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Jay Hardy is the founder and CEO of Hardy Diagnostics. He began his career in microbiology as a Medical Technologist in Santa Barbara, California.

In 1980, he began manufacturing culture media for the local hospitals. Today, Hardy Diagnostics is the third largest media manufacturer in the US, and produces over 2,700 products used in clinical and industrial microbiology laboratories throughout the world.

Ever wonder about the origin of the Petri plate? We have Julius Richard Petri to thank for this marvelous little invention. Let's take a look back in time when Julius Petri was a military physician working in Robert Koch's lab in Germany during the 1880's.

The current state of the art in the microbiology lab was to pour an agar based nutrient media into an open dish and place it under a bell jar.



The plates were continually exposed to air and the bell jar had to be removed for viewing of the plates. Prior to this, all cultures were grown in glass tubes on slants. Petri recognized the benefit of growing cultures in open dishes rather than tubes in order to increase the streaking area to obtain isolated colonies. However, the bell jar method resulted in many contaminated

cultures, thus frustrating Koch's researchers.

The year was 1887, six years after another co-worker in Koch's lab, Fanny Hesse, invented the use of agar to create a solid medium. Julius Petri had the idea of placing a slightly larger glass lid on top of the glass dish that contained the culture media.



This method proved to be far simpler and more reliable than the bell jar. Thus the "Petri Plate" was born and is still in common usage 121 years later.

Julius Petri went on to work in a tuberculosis lab in Germany and published nearly 150 papers on bacteriology and hygiene. He was in his later days a rather vain, overweight man, who dressed in the uniform of chief

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army doctor whenever the opportunity presented itself. The sash around his protruding abdomen reminded one observer of the equator around the globe.

In 1921, Petri died in the city of Zeitz, Germany, but his namesake invention lives on in labs around the world.

Very little has changed regarding Petri's invention. Today the plate is constructed of disposable polystyrene instead of glass, and features small "lugs" or tabs on the lid to allow for a limited amount of air exchange, which is necessary for the aerobic growth of bacteria and fungi.



The plates are mass produced on large plastic injection molding machines and subsequently sterilized by either gamma radiation or ethylene oxide gas (EtO) before becoming available to microbiologists.

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Hardy offers all sizes and shapes of Julius' clever invention. See our web catalog for a complete selection. [Click here](#) or visit www.HardyDiagnostics.com.