

microBYTES™

A Hardy Diagnostics eNewsletter



October, 2019

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*You know it's secure
when you hear the click!*

Clik-Seal Specimen Cups



*Eliminate the leakers in your lab!
The nursing staff will know they have a tight
seal due to the audible click!*

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[Request free samples.](#)
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Now there's an easy way to detect carbapenem resistance...

CARBA 5



Micro Musings...



CartoonStock.com

Screen for Carbapenem Resistance

HardyCHROM CRE



Our new, FDA-cleared, chromogenic media for
Carbapenem-Resistant Enterobacteriaceae





Hardy's new Carba 5 detects the five major bacterial enzymes of carbapenem resistance. This new lateral flow device gives you results in only 15 minutes at a price much much lower than PCR!

[Watch a short video...](#)

[Learn more...](#)

[Order here...](#)

Control Organisms



Hardy offers a complete selection of over 900 ATCC derived microorganisms for use in Quality Control procedures.

[Learn more...](#)

Recarbio now available!

New Antibiotics

Disks Now Available from Hardy



[See all our products for detecting resistance.](#)

[See our complete Chromogenic product offering.](#)

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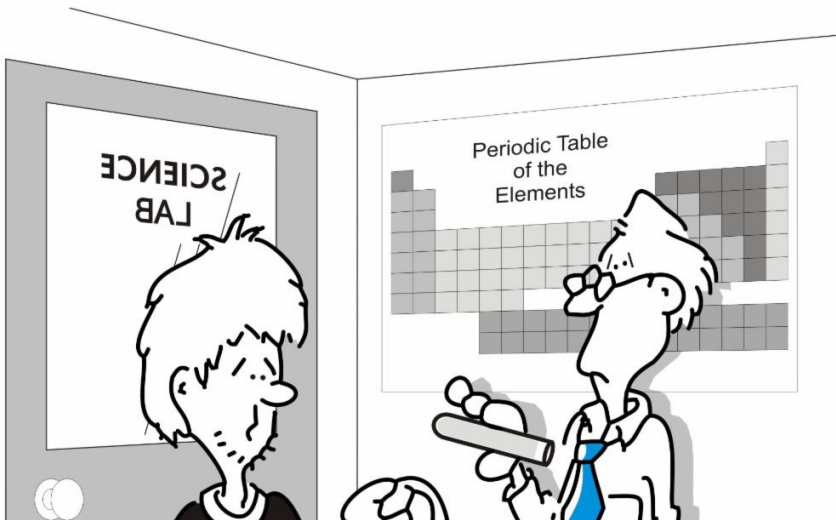
* * * * *

A new kit for kids' science projects!



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- [Imipenem/Relebactam](#), "Recarbion" (Z9441, Z9445)
- [Eravacycline](#), "Xerava" (Z9401, Z9405)
- [Plazomicin](#), "Zemdri" (Z9331)
- [Ceftazidime/Avibactam](#), "Avycaz" (Z9351, Z9355)
- [Ceftolozane/Tazobactam](#), "Zerbaxa" (Z9341, Z9345)
- [Delafloxacin](#), "Baxdela" (Z9301, Z9305)
- [Meropenem/Vaborbactam](#), "Vabomere" (Z9321, Z9325)
- [Omadacycline](#), "Nuzyra" (Z9411)

HardyDisks:

- Are compatible with all BD Disk dispensers.
- Feature "last disk recognition" so you know when a refill is needed.
- Include all traditional and newer antibiotics.

[Learn more](#) about HardyDisks.

[View](#) our AST mini-catalog.



"MY HOMEWORK ATE MY DOG."

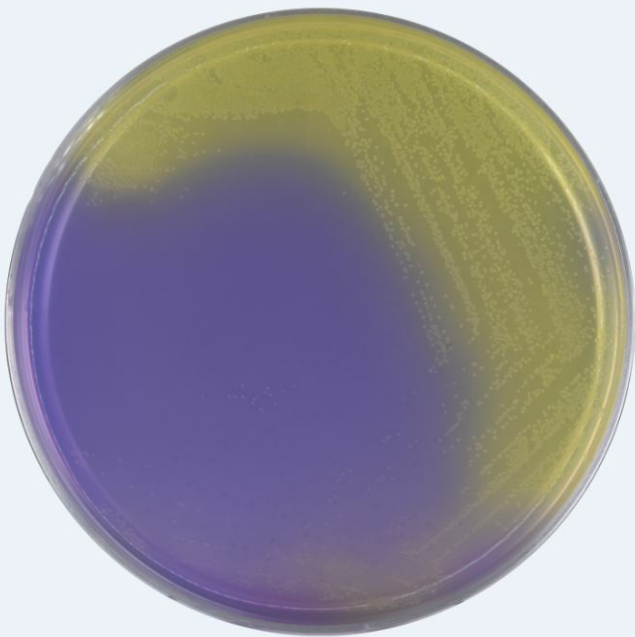
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For the detection of Gardnerella vaginalis

Gardnerella Selective Agar

Our new G. vag plate contains no human blood!

No need for blood-borne pathogen precaution
when detecting Bacterial Vaginosis.



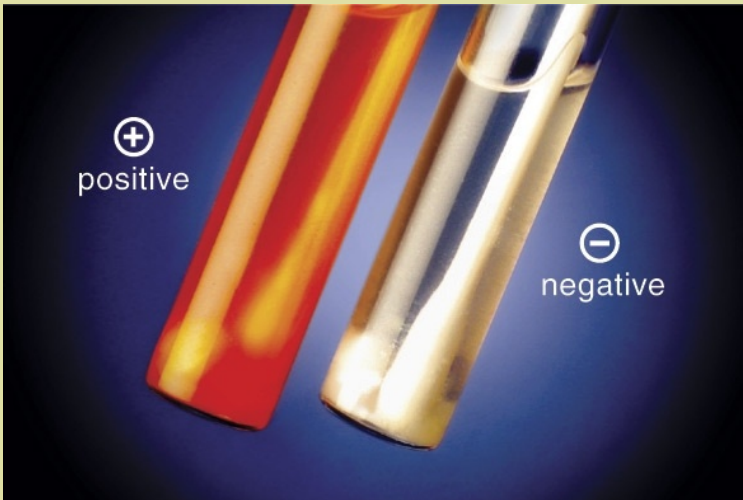
[Learn why](#) this is the best way to culture for
G. vaginalis.

[Request samples](#) for your laboratory.

* * * * *

*For the detection
of Group B Strep...*

Carrot Broth One-Step



*Every test is an opportunity for
a new life to thrive and grow...*



- Improved...No tile addition needed!
- Detects hemolytic Group B Strep from the initial broth culture
- Provides results in as little as sixteen hours
- Found to be 100% sensitive and up to 100% specific in a [recent study](#)

Microbiologists hit pay dirt!



A New Class of Antibiotics

Soil reveals hope for new ways to treat increasingly resistant bacteria.

Since the discovery of penicillin in 1928, healthcare professionals have
collected thousands of antibiotic compounds from soil bacteria.

[Watch a short video to learn more...](#)

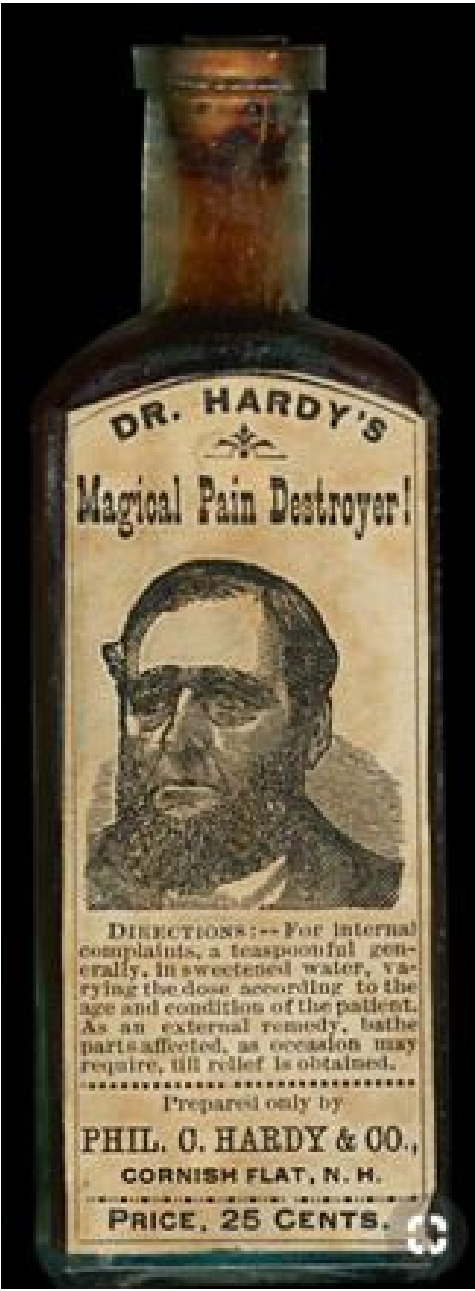
[Request samples.](#)

[Place your order.](#)

[How is Carrot Broth making a difference?](#)

* * *

Strange ads from the past...



The text on Hardy's Magical Pain Destroyer elixir reads:

"For internal complaints, a teaspoonful generally, in sweetened water, varying the dose according to the age and condition of the patient. As an external remedy, bathe parts affected, as occasion may require, till relief is obtained."

Note: The connection to Hardy Diagnostics is purely coincidental. This product has not been evaluated by the Food and Drug Administration, and is not intended to diagnose, treat, cure, or prevent any

disease.



Auto Brewery Syndrome

Can you get drunk without drinking alcohol?



Yes! If you take large continuous doses of antibacterial medications and eat a lot of carbohydrates, you could be a candidate for Auto Brewery Syndrome. People with this affliction have the yeast

successfully utilized the use of antibiotics for many types of bacterial infections. Since that discovery, over 100 antibiotics have been developed, many of which have been rendered ineffective by increasing antimicrobial resistance patterns. Consequently, many pharmaceutical companies are searching for novel compounds to more effectively combat microorganisms which have become highly resistant. There are several new methods of compound synthesis which are being developed, but a more natural approach has demonstrated that there are still highly effective compounds buried in the dirt.

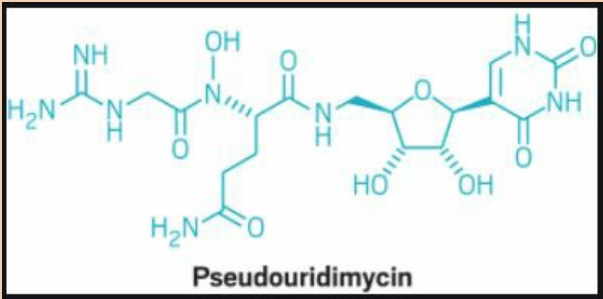
Scientists at the Waksman University in New Jersey have developed a method for screening soil samples in order to isolate organisms that may produce a novel antimicrobial agent. After applying this new method and screening over 3,000 Actinobacterial and fungal extracts, a new antimicrobial agent has been isolated from *Streptomyces albus* and named, "pseudouridimycin" (2).



Pseudouridimycin (PUM) was discovered in 2017, and has demonstrated outstanding results during *in vitro* studies (1). PUM utilizes a mechanism not found in any other antimicrobial agent. This allowed for the creation of a new class of "c-nucleoside" antimicrobials (1).

PUM kills bacteria by adhering to RNA polymerase and binding to the active site, preventing RNA

transcription. It has proven to be highly effective against Gram-negative, Gram-positive, and dormant organisms (1). PUM is the first antibiotic in the new class of pseudouridine containing nucleoside antibiotics, and will soon be accompanied by strepturidin and desoxy-pseudouridimycin (2).



With the increasing rate of antimicrobial resistance, we are in urgent need for new and effective treatments. Due to research from the Waksman University, a new class of antimicrobial agents has been developed, which will have to be thoroughly tested for toxicity before clinical trials can begin. The entire process to bring a new drug to market could take up to ten years. The discovery of pseudouridimycin offers renewed hope that antimicrobial resistance can be overcome.

Ref: [1](#), [2](#)



Miles Amby
R&D Microbiologist
HARDY DIAGNOSTICS

* * *

Trio Bas Air Samplers



organism, *Saccharomyces cerevisiae* in their gastrointestinal tracts which ferments carbohydrates to produce alcohol, sometimes in excess of the legal limit for driving! The symptoms can range from brain fog and impaired coordination to complete intoxication. The treatment would include anti-fungals, probiotics, and a low carbohydrate diet.

[Learn more...](#)

Phraseology...



"OK"

OK or "Okay" is probably the most versatile of all American words. It can be a noun: "I gave this my OK." It can be a verb: "I OK'd it." It can be an adverb: "She did it OK." It can also be an adjective: "This is OK."

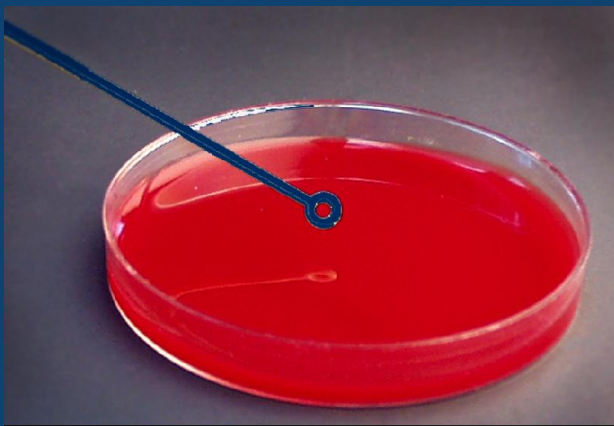
The origin of OK has been in dispute for many years.

It could come from the Greek phrase "ola kala" which means "all good." Then there's the Native American Choctaw word "Okeh" that President Woodrow Wilson would use to OK his documents. Another theory has to do with Martin Van Buren, the eighth president of the US, who belonged to the Old Kinderhook men's club. If you were in this exclusive club, then you were "OK." Or maybe it stands for the old telegraph term "Open Key." And lastly, there's the theory that Charles Gordon Greene, editor of the Boston Morning Post, came up with an abbreviation in 1839 -- o.k. -- which he indicated was an incorrect spelling of "all correct" which he teasingly said was "oll korrekt" in his satirical piece on the abuse of proper grammar.

It looks as though we will have to be just OK with never knowing the exact origin of this very popular abbreviation that is now in common use throughout the entire world.

* * * * *

Inoculating Loops



Hardy offers a complete selection of loops.

Whether you prefer platinum, nichrome, or plastic...
Hardy has it!

[See our complete offering..](#)

Two heads are better than one!

Now with Bluetooth capability!

Trio Bas from Orum International has a robust impact air sampler for every type of use. Single, double, or triple heads are available from Hardy Diagnostics.

- [Watch a short video](#) that will explain why the Trio Bas is the best choice for your clean room.
- [See the complete Trio Bas catalog.](#)
- [Please have a sales rep contact me](#) about air samplers.

Testimonial from a Pharmaceutical Lab worker...

"The two heads of TRIO BAS DUO air sampler was one of the best investments we made during the last two years. The laboratory staff, which is responsible of the bacteriological sampling, is able to double the number of environmental microbial cycles per day. This means more efficiency and lower cost, together with the possibility to increase the number of sampling in other areas of the premises in the future."

* * *

Do you perform colony counts?



Compact Dry

- Self diffusing of sample - No spreader needed
- Room temperature storage
- Rigid plate with removable lid
- Stackable plates to conserve space
- Many media formulas available

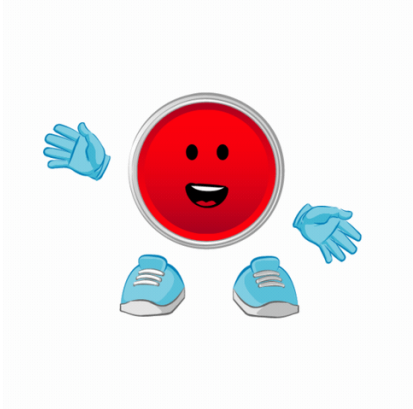
[Learn more...](#)

[Request Samples of Compact Dry](#)



What is Hardy all about?

[View a short video to find out...](#)



Did you know Hardy Diagnostics is 100% owned by its employees?

* * *

Now Available!

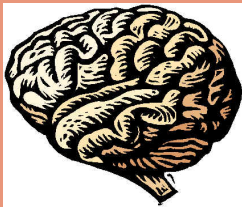
The Wizard is an automated Compact Dry plate reader that will perform colony counts within seconds!

[Find out more...](#)
[Watch a short video...](#)

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How Our Founding Fathers Promoted Vaccinations

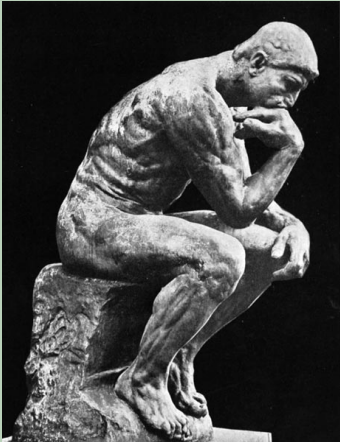
Brainteasers



Got a tired brain?

[Wake it up here ...](#)

Think about it...



- * If nothing sticks to Teflon, how do you get Teflon to stick to a pan?
- * Why do you need a driver's license to buy liquor when you can't drink and drive?
- * Why isn't phonetic spelled the way it sounds?
- * Why are there interstate highways in Hawaii?
- * Why are there flotation devices under plane seats instead of parachutes?
- * Why are cigarettes sold in gas stations when smoking is prohibited there?

* * *



We largely consider the debate over vaccines to be a modern controversy. However, the issue of vaccine use has been around for centuries, even back to the start of the United States of America. So what exactly did our founding fathers think of vaccines, and how did they play a role in society and public health at the birth of this country?



George Washington is considered by many to be a great military leader. His military tactics led to American independence and although rarely discussed, some of those victories can be attributed to his controversial medical actions. Ninety percent of deaths in the continental army were caused by disease, namely Variola, the

Fungal slide cultures made easy!



Hardy's MycoVue does all the work for you! Allow your mycology cultures to grow undisturbed in a humidified chamber. The entire unit can be placed on the microscope stage for viewing.

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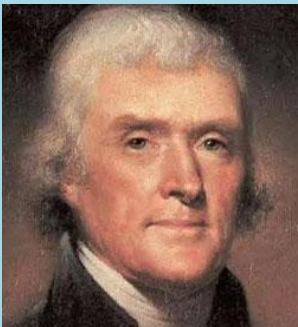


[Click here](#)

Wisdom to Ponder...



smallpox virus. In support of vaccination, George Washington wrote to Dr. William Shippen Jr., the third Director General of hospitals of the Continental Army, *"Necessity not only authorizes but seems to require the measure, for should the disorder infect the army...we should have more to dread from it, than from the sword of the enemy."* He was speaking of inoculation of all the forces traveling through Philadelphia. During this time, "vaccination" was the process of inoculating an individual with a less-deadly form of the disease-causing bacteria or virus. This was commonly practiced throughout Europe and resulted in immunity among British troops, giving them an advantage over the colonists. However, the Continental Congress prohibited the practice of inoculation in 1776 for fear of the potential for contamination. Seeing the vulnerability of the continental regulars, Washington knew the only way to win the war was to order a mass inoculation, contagion risks aside. In February 1777, Washington communicated orders to his commanding officers to oversee mass inoculations of their troops. The health of Washington's army was pivotal in critical battles that ultimately led to independence from Britain (1).



Thomas Jefferson is honored as a patriot, farmer, politician, philosopher, inventor, and architect. However, his scientific contributions are less known. He was a competent botanist and possessed a keen interest in archaeology and agriculture. He also made contributions to medical science. Jefferson was a supporter of Dr.

Benjamin Waterhouse, who introduced vaccination to the United States. Dr. Waterhouse vaccinated his whole family against smallpox and subsequently exposed them to infected patients to prove his confidence in the method. Knowing the importance of this subject, Dr. Waterhouse submitted a letter to President John Adams titled "Prospect of Exterminating the Smallpox" who received it well, but did not do much to investigate the matter further. It was Thomas Jefferson who felt strongly about Waterhouse's proposal and worked tirelessly to promote vaccination as a way to combat such a devastating disease. He conducted his own "clinical trials," so to speak, and found some flaws in Waterhouse's method, including the temperature at which the vaccine was stored. Jefferson proved he knew the scientific method very well. Once he was successful in his vaccination trials, he sent vaccines to Washington DC, Petersburg, and Richmond, where inoculation attempts had previously been unsuccessful. He proved that his improvements to the method of vaccination were very effective and continued to promote vaccination during his presidency (2).

We give credit to the founding fathers for establishing this country and fighting for its independence. The advancement of medical science is largely thought to only have taken place in our recent history. However, public health was a great concern to those early colonists who were helping to shape the nation. They saw that the success of their newly formed society was contingent upon the health of those who were involved in building it.

Ref: [1](#), [2](#)



Alani Barajas
R&D Microbiologist
HARDY DIAGNOSTICS



Bono

Bono is an Irish singer-songwriter, musician, venture capitalist, businessman, and philanthropist. He is best known as the lead vocalist and primary lyricist of rock band U2. He was knighted by Queen Elizabeth II for his contributions to music and for his humanitarian efforts. He has received 22 Grammy awards.

"As a rock star, I have two instincts, I want to have fun, and I want to change the world. I have a chance to do both."

"To be one, to be united, is a great thing. But to respect the right to be different is maybe even greater."

"We thought that we had the answers, it was the questions we had wrong."

"My heroes are the ones who survived doing it wrong, who made mistakes, but recovered from them."

"The less you know, the more you believe."

"It's stasis that kills you off in the end, not ambition."

"Overcoming my dad telling me that I could never amount to anything is what has made me the megalomaniac that you see today."

"Marriage is this grand madness, and I think if people knew that, they would perhaps take it more seriously."

"The job of art is to chase ugliness away."

"America is not just a country, it's an idea, and real Americans are getting busy."

"Actually oddly enough, I think my work, the activism, will be forgotten. And I hope it will. Because I hope those problems will have gone away."

"I'm actually starting to like more and more people who have convictions that are unpopular."

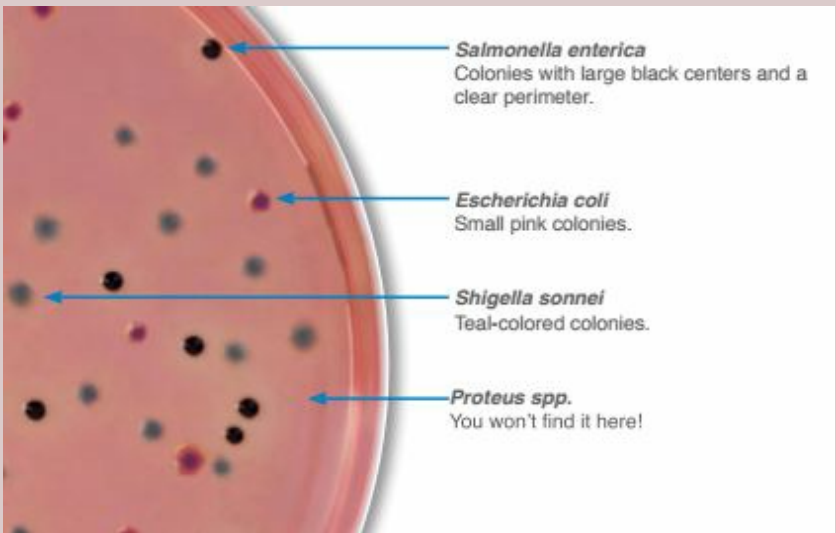


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Stool cultures with no interference from Proteus!

HardyCHROM SS NoPRO



NOTE: New study shows **50% less colony work-ups**, for an overall **cost savings of 80%!**
[Find out how you can save also...](#)

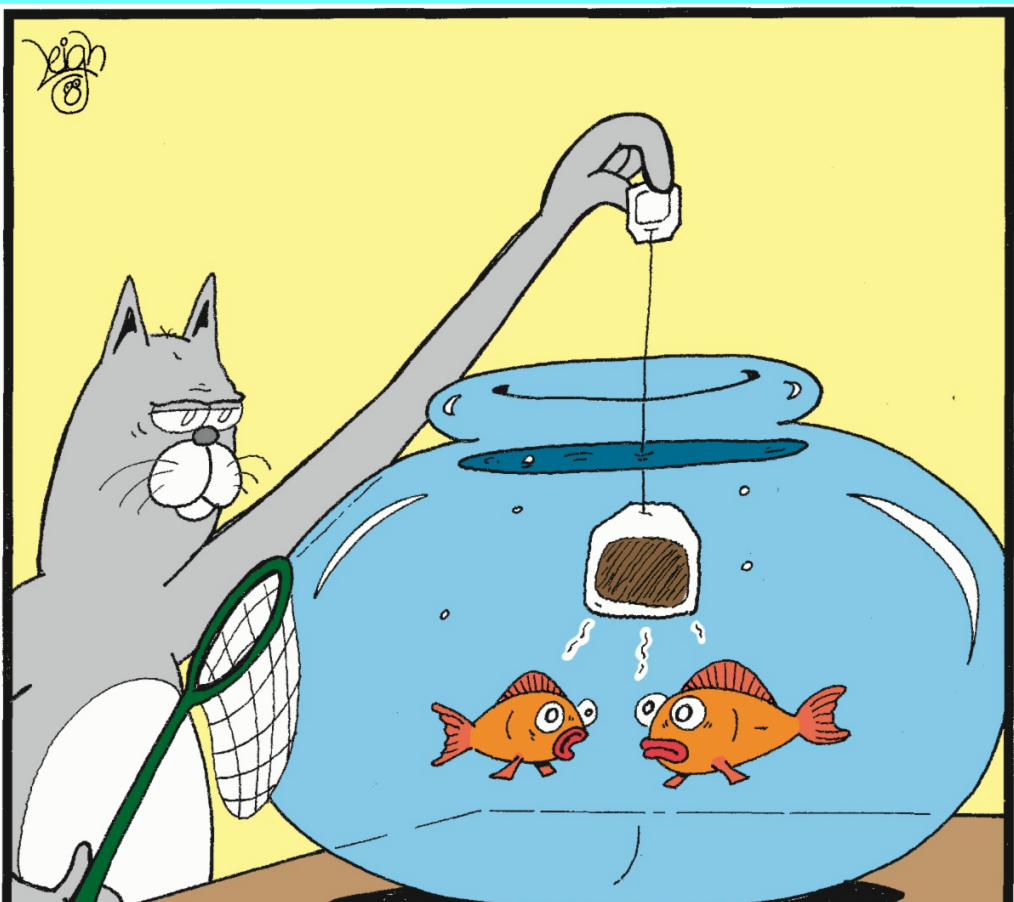
- Reduces costly false-positive work-ups, due to *Proteus* spp.!
- Less colony picking, subculturing, and identifications
- No need for TSI, LIA, or KIA tubes
- Reduces use of expensive ID cards
- Reduces the number of plates for primary stool setup
- Increased specificity
- Easy Identification by patented chromogenic reaction
- The only chromogenic media that will detect both *Salmonella* and *Shigella*

Learn more about HardyCHROM SS NoPRO.

Place your order now.

Try out some free samples.

RUBES





Watch a short video
to learn how easy it is
to order from Hardy on-line!

*Pick... Click...
And your order is on its way!*

* * *

Did you know?



Hardy Diagnostics...

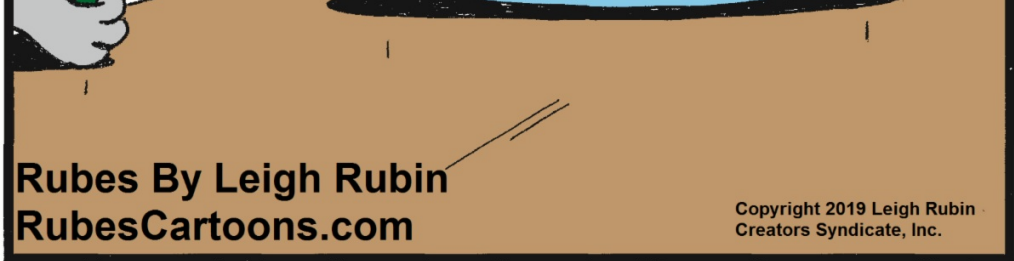
- Manufactures over 2,700 microbiology products for you to choose from.
- Stocks over 13,000 laboratory products for your "one-stop shop" experience.
- Is celebrating its 39th year of serving microbiologists.
- Manufactures from two ISO certified factories; one in California and one in Ohio.
- Maintains nine distribution centers in the U.S. for faster turn-around-time to your lab.
- Is ISO 13485 certified for the manufacture of medical devices to give you confidence in our products.
- Services over 10,000 labs and maintains a worldwide network of over 80 distributors.
- Is a 100% Employee Owned company. *"If we act like we own the place...it's because we do!"*



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See the Company Video.

Send a message to the president.



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"Is it just me, or are you also suddenly
feeling exceptionally jumpy?"

Find more
Want to book Leigh as a speaker at your next event?

Warning:

PUN ZONE
AHEAD



- ~ He often broke into song because he couldn't find the key.
- ~ A Local Area Network in Australia is the LAN down under.
- ~ Did you hear about the short fortune teller that escaped from prison? He was a small medium at large.
- ~ Thankfully the man who fell into an upholstery machine is now fully recovered.
- ~ When a clock is hungry, it goes back for seconds.
- ~ A chicken crossing the road is 'poultry in motion.'

#



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"As Hardy Diagnostics approaches its 40th year of serving microbiologists in the laboratory, I would like to thank each of our customers for their support and loyalty. It truly has been a pleasure to serve you!

If there is any way we can improve or expand upon our service, would you please let me know?"

Jay Hardy, CLS, SM(NRCM)
President
HARDY DIAGNOSTICS

[Send Jay a message...](#)



I was doing some renovation of my house.

I tore down a wall, and to my great surprise,
I discovered a fully furnished room there!



Then I remembered that I live in a duplex.

Ever heard one of these?

What's a Malaphor?

*A malaphor is an erroneous combination
of two aphorisms or idioms...Such as:*

It isn't rocket surgery!

We'll burn that bridge when we get to it.

It's time to swallow the bullet.

It's as easy as falling off a piece of cake.

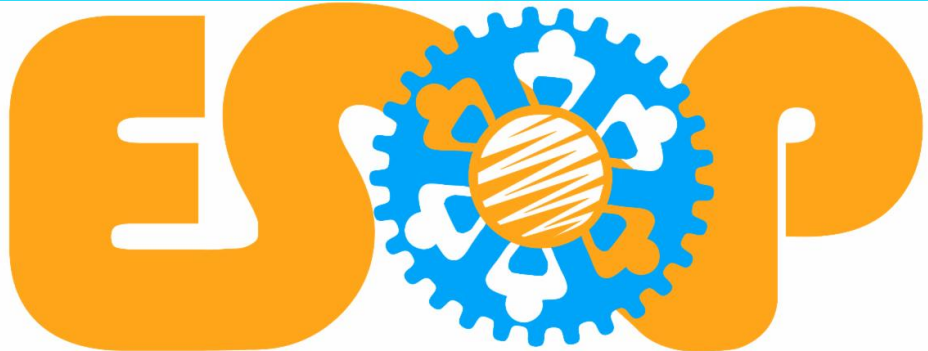
Let dead dogs sleep.

That guy's out to butter his own nest.

He's between a rock and the deep blue sea.

You hit the nail right on the nose.

She really stuck her neck out on a limb.



*Sometimes we act like we own the place...
Because we do!*



For your ordering convenience!

Available at
amazon



 **HARDY**
DIAGNOSTICS

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