

We first tried to use the most general shape associated with each genus, which are often consistent across species (spp.) (first choice for shape). If there was documented species variability, either the most common species (second choice for shape) or well known species (third choice for shape) is shown.

### **Corynebacterium:**

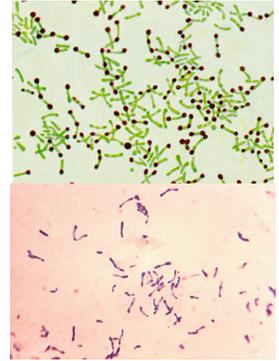
pleomorphic bacilli. Due to their snapping type of division, cells often lie in clusters resembling chinese letters

(<https://microbewiki.kenyon.edu/index.php/Corynebacterium>)

Shown is *Corynebacterium diphtheriae*

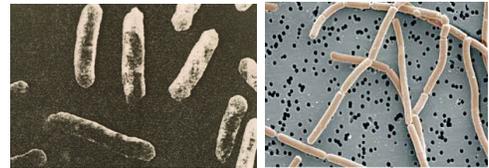
Figure 1. Stained *Corynebacterium* cells. The "barred" appearance is due to the presence of polyphosphate inclusions called metachromatic granules.

Note also the characteristic "Chinese-letter" arrangement of cells. (<http://textbookofbacteriology.net/diphtheria.html>)



### **Lactobacillus:**

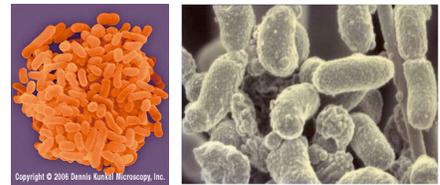
Lactobacilli are rod-shaped, Gram-positive, fermentative, organotrophs. They are usually straight, although they can form spiral or coccobacillary forms under certain conditions. (<https://microbewiki.kenyon.edu/index.php/Lactobacillus>)



### **Porphyromonas:**

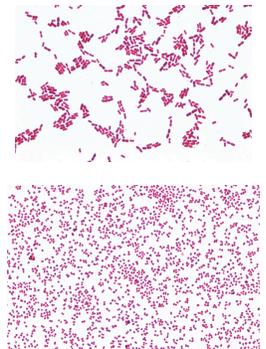
A genus of small anaerobic gram-negative nonmotile cocci and usually short rods that produce smooth, gray to black pigmented colonies the size of which varies with the species. (<http://medical-dictionary.thefreedictionary.com/Porphyromonas>)

Shown: *Porphyromonas gingivalis*



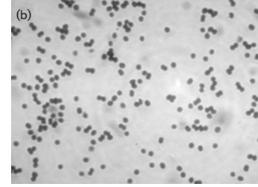
### **Moraxella:**

*Moraxella* is a genus of Gram-negative bacteria in the Moraxellaceae family. It is named after the Swiss ophthalmologist Victor Morax. The organisms are short rods, coccobacilli or, as in the case of *Moraxella catarrhalis*, diplococci in morphology (<https://en.wikipedia.org/wiki/Moraxella>). \*This one could be changed to a diplococcus shape because of *Moraxella catarrhalis*, but I think the short rods are fair given the number of other *Moraxella* with them.



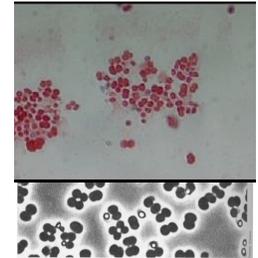
### Jeotgalicoccus: 🍷

Jeotgalicoccus is a genus of Gram-positive, facultatively anaerobic, and halotolerant to halophilic bacteria. The cells are coccoid. (<https://en.wikipedia.org/wiki/Jeotgalicoccus>)



### Sporosarcina: 🍷

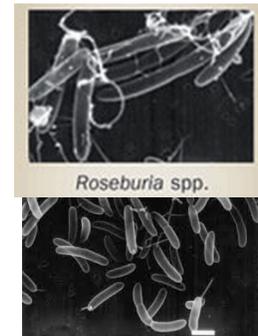
The cells of the species of Sporosarcina are either rod-shaped or coccoid. (<https://en.wikipedia.org/wiki/Sporosarcina>) Sporosarcina ureae are aerobic, motile, spore-forming Gram-positive cocci, originally isolated in the early 20th century from soil. ([https://en.wikipedia.org/wiki/Sporosarcina\\_ureae](https://en.wikipedia.org/wiki/Sporosarcina_ureae))  
Shown: Sporosarcina ureae



### Roseburia: 🍷

Roseburia intestinalis is a saccharolytic, butyrate-producing bacterium first isolated from human faeces. It is anaerobic, gram-positive, slightly curved rod-shaped and motile by means of multiple subterminal flagella. ([https://en.wikipedia.org/wiki/Roseburia\\_intestinalis](https://en.wikipedia.org/wiki/Roseburia_intestinalis)) & (<http://www.ncbi.nlm.nih.gov/pubmed/12361264>)

Shown: Roseburia intestinalis and an spp image



### Collinsella: ➔

(Difficult to find a description of the shape of collinsella specifically, but the family it is in is considered highly homogeneous in shape as regular bacilli without a flagellum) Coriobacteriaceae are usually nonmotile, nonspore-forming, nonhemolytic, and strictly anaerobic bacteria that grow as small rods; stain Gram-positive; ([http://link.springer.com/referenceworkentry/10.1007/978-3-642-30138-4\\_343](http://link.springer.com/referenceworkentry/10.1007/978-3-642-30138-4_343))

### Megamonas: 🍷

Megamonas rupellensis: culture of a Gram-negative to Gram-variable, rod-shaped, non-spore-forming anaerobic bacterium (<http://www.ncbi.nlm.nih.gov/pubmed/19060083>)

A common megamonas is Megamonas hypermegas, which was recently reclassified from Bacteroides hypermegas to create the new genus Megamonas. Images are of Bacteroides hypermegas (<http://www.sciencedirect.com/science/article/pii/S0721957182800203>)

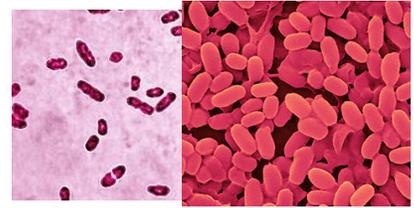


### Pasteurella:

*Pasteurella multocida* is a Gram-negative, nonmotile, penicillin-sensitive coccobacillus belonging to the Pasteurellaceae family.

*Yersinia pestis* (formerly *Pasteurella pestis*) is a Gram-negative, rod-shaped coccobacillus, a facultative anaerobic bacterium that can infect humans and animals. (wikipedia for both)

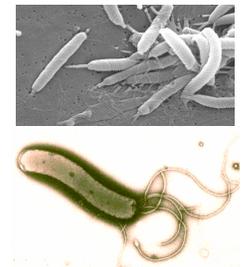
Shape: general for coccobacillus



### Helicobacter:

*Helicobacter* is a genus of Gram-negative bacteria possessing a characteristic helical shape. (Wikipedia) *Helicobacter pylori* is a Gram-negative organism that has a helical or spiral shape and has 6-8 flagella at one end. ([https://microbewiki.kenyon.edu/index.php/Helicobacter\\_pylori](https://microbewiki.kenyon.edu/index.php/Helicobacter_pylori))

Shown: *Helicobacter Pylori*



### Catenibacterium:

*Catenibacterium* (Ca.te.ni.bac.te«ri.um. L. fem. n. catena chain; Gr. dim. n. bakterion a small rod; M.L. neut. n. *Catenibacterium chain rodlet*). Cells occur in tangled chains.

*Dermabacter* (<http://ijs.microbiologyresearch.org/content/journal/ijsem/10.1099/00207713-50-4-1595?crawler=true&mimetype=application/pdf>)

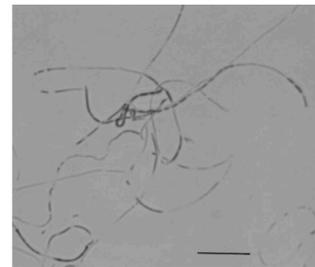
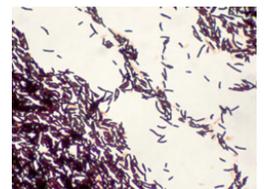


Fig. 1. Cellular morphology of *Catenibacterium mitsuokai*. Bar, 10 µm.

### Dermabacter: maybe change to

*Dermabacter hominis*, formerly known as coryneform bacteria of Centers for Disease Control groups 3 and 5, is a facultative anaerobic, catalase-positive, non-motile, glucose, maltose and sucrose fermentative, irregular gram-positive bacillus. (<http://onlinelibrary.wiley.com/doi/10.1002/2052-2975.31/full>)

shown: *dermabacter hominis*



### Treponema:

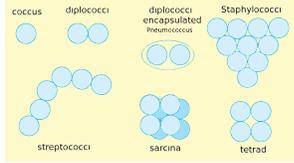
Treponemes have a helical or sinusoidal shape and a double membrane. The spirochaete has two flagella that originate at either end of the organism and point inward along its length, and are contained in the periplasmic space between the inner and outer membranes and enable them to move. (<https://microbewiki.kenyon.edu/index.php/Treponema>)

Shown: *Treponema pallidum*

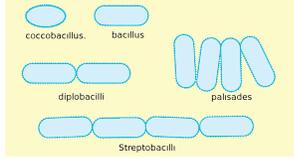


# A couple general bacterial shape references:

## Cocci



## Bacilli



## Budding and appendaged bacteria



## Others

