

Medical Eponyms in Gastrointestinal Tract

경희의대 김윤화

Eponym

- The name of a person or thing, whether real or fictitious, after which a particular place, tribe, era, discovery, or other item is named or thought to be named (Wikipedia)
- The name of a disease, structure, operation or procedure, usually derived from the name of the person who discovered or described it first (Stedman's medical dictionary)

Eponyms in Pathology of the Gastrointestinal Tract

- Serve as a means of honoring individuals who have important discoveries and observations
- Fail to convey a precise meaning or definition
- Incorrectly applied initially and propagated for years
- Important for proper reporting and accurate communication
- Bring some humanity back into the science of medicine

Meckel's diverticulum



Johann Friedrich Meckel, the Younger (1781-1833)

German anatomist

First described by Fabricius Hildanus in the sixteenth century

Über die Divertikel am Darmkanal. Archiv Fur die Physiokogie, Halle, 1809, 9:421-453



Meckel was not the first to recognize the enteric diverticulum as a vestige of the vitelline duct, but his meticulous description of its embryonic origin fixed his name to the structure

Hirschsprung's Disease (Congenital aganglionic megacolon)



Harald Hirschsprung (1830-1916)

Denmark pediatrician

In 1886, describing two infants who had died with swollen bellies (Stuhltragheit Neugeborener in Folge von Dilatation und Hypertrophie des Colons) -The autopsies showed identical pictures with constipation, a pronounced dilatation and hypertrophy of the colon as the dominant features.

Hirschsprung was not the first to describe the condition (1691) that bears his name, but his experience of congenital megacolon led to a detailed as a clinical entity.

He erroneously believed the proximal, dilated bowel to be diseased.



Zenker's Diverticulum

(Pharyngoesophageal diverticulum)



Friedrich Albert von Zenker (1825-1898)

German pathologist

Published a monograph *Krankheiten des Oesophagus* in which he meticulously cited all previously described cases of hypopharyngeal pulsion diverticula in 1867 (with clinician Hugo von Ziemmsen)

(The first report was that of Abraham Ludlow of London in 1764)

Discovery of trichinosis

***Plummer-Vinson syndrome* (Sideropenic dysphagia)**

The concept of dysphagia caused by formation of a mucosal web in the proximal esophagus association with iron-deficiency anemia



Henry S. Plummer (1874-1936): American physician

Diffuse dilatation of the esophagus without anatomic stenosis (cardiospasm). A report of ninety-one cases. *JAMA* 58:2013, 1912

Porter P. Vinson (1890-1959): American surgeon

A case of cardiospasm with dilatation and angulation of the esophagus. *Med Clin North Am* 3:623, 1919

In Britain, known as Kelly-Paterson syndrome

Kelly AB. Spasm at the entrance of the esophagus. *J Laryngo Rhino Otology* 34:285, 1919

Paterson DR. A clinical type of dysphagia. *J Laryngo Rhino Otology* 34:289, 1919



Schatzki Ring (Lower esophageal ring)

Richard Schatzki (1901-1992)

American radiologist

With J.E. Gary

Dysphagia due to a diaphragm-like localized narrowing in the lower esophagus (lower esophageal ring).

Am J Roentgenol 1955;70:911



Mallory-Weiss Syndrome



George Kenneth Mallory (1900-1986)

American pathologist



Soma Weiss (1898-1941)

American physician

Described 15 cases of severe, painless hemorrhage caused by a tear in the mucosa of the esophagus or gastro-esophageal junction preceded by vomiting in alcoholic patients

Hemorrhages from lacerations of the cardiac orifice of the stomach due to vomiting
(Am J Med Sci 1929;178:506)



Boerhaave's Syndrome (Esophageal perforation)

Hermann Boerhaave (1668-1738)

Netherland physician



Notoriously described in 1724 the case of ill-fated Baron Johannes von Wassenaar, the Grand admiral of the Dutch fleet, who had the reputation of sedentary gourmand.

The Baron dined on a rather large meal and several hours later, because of dyspepsia, took several doses of an emetic. Subsequent retching caused a tearing chest pain, died within 24 hours.

At autopsy, Boerhaave discovered a large volume of intraabdominal air and a finger-sized tear on the left esophagus. He concluded that the tear was the result of the violent retching resulting from the Baron's ingestion of the emetic.

Among the first to use physiology as a term for study of bodily functions

Barrett Esophagus (Columnar lined esophagus)

Norman Rupert Barrett

English thoracic surgeon (1903-1979)

Chronic peptic ulcer of the oesophagus and oesophagitis Br J Surg 1950

The ulcerated, columnar epithelium-lined organ was a tubular segment of stomach that was tethered in the chest by a congenitally short esophagus.

Allison and Johnstone argued that this columnar epithelium-lined structure was indeed the esophagus. Thorax 8;87, 1953



Figure 1 Norman Rupert Barrett.

Columnar-lined esophagus: Time to drop the eponym of "Barrett": historical review. J Gastroenterol Hepatol 23:707-715, 2008

Curling's ulcer



Thomas Bilzard Curling (1811-1888)

England surgeon

This condition was first described in 1823.

Described duodenal ulceration in association with severe burns in 10 patients

On acute ulceration of the duodenum in cases of burn. *Medico-Chirurgical Transactions* 25:260, 1842



Cushing's ulcers

Harvey Williams Cushing (1869-1939)

American neurosurgeon

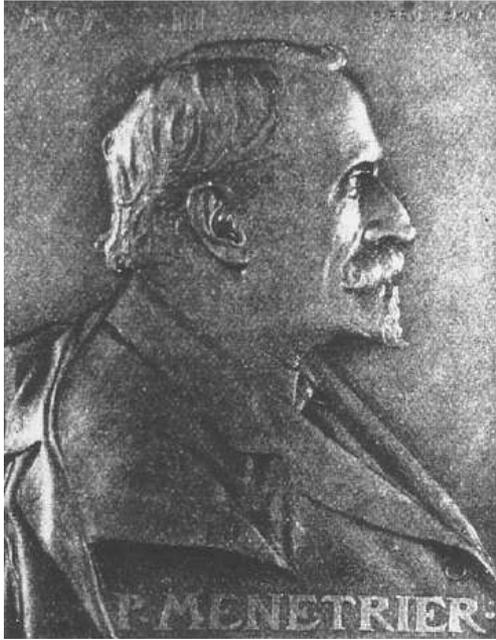
Described the deep, often bleeding ulcerations in the proximal gastrointestinal tract that can occur in association with certain lesions of the central nervous system

(Peptic ulcer and the interbrain. Surg Gynecol Obstet 1932, 55:1)



Great American Series 1988

Ménétrier's Disease (Hyperplastic hypersecretory gastropathy)



Pierre Eugene Menetrier (1859-1935)

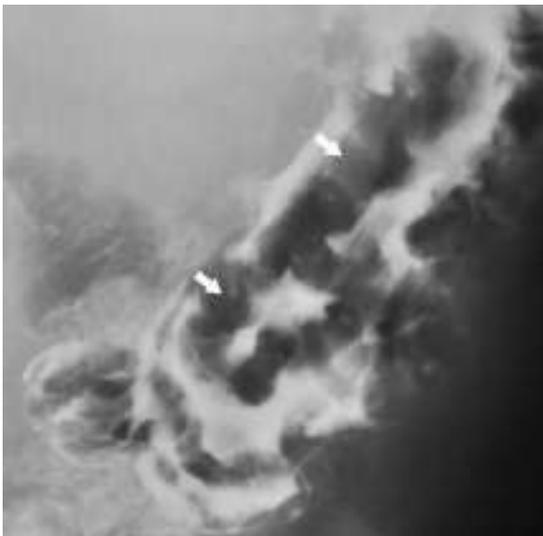
French pathologist

First described this disorder while performing post-mortem studies, and noticing hyperplastic changes of the gastric mucosa in cadavers

Treatise on polyadenomatosis and mucosal hyperplasia in the stomach (*Des polyadenomes gastriques et de leurs rapports avec le cancer de l'estomac*)

(Arch Physiol Norm Pathol 1888;1:32)

- First to recognize the potential transformation of benign to malignant neoplasia
- Not recognized association of protein losing gastroenteropathy



Zollinger–Ellison syndrome



Robert Milton Zollinger (1903-1993)

American surgeon



Edwin Homer Ellison (1918-1970)

American surgeon

Zollinger RM, Ellison EH: Primary peptic ulcerations of the jejunum associated with islet cell tumors of the pancreas. *Ann Surg* 142:709, 1955

Virchow's Sentinel Node

(Signal node or Troisier's sign)



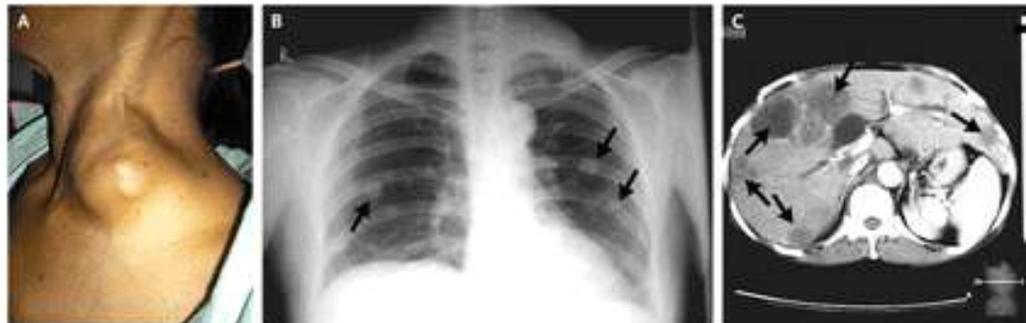
Rudolf Ludwig Karl Virchow (1821-1902)

German pathologist

First described supraclavicular lymphadenopathy as a signal of otherwise obscure gastric cancer
"Zur Diagnose der Krebse in Unterleibe". Med Reform 45:248, 1848

- The French pathologist Charles Emile Troisier noted in 1889 that other abdominal cancers, too, could spread to the node.

" A life filled with toil and work is not a burden, but a blessing."



Sister Mary Joseph nodule

Sister Mary Joseph Dempsey (1856-1939)

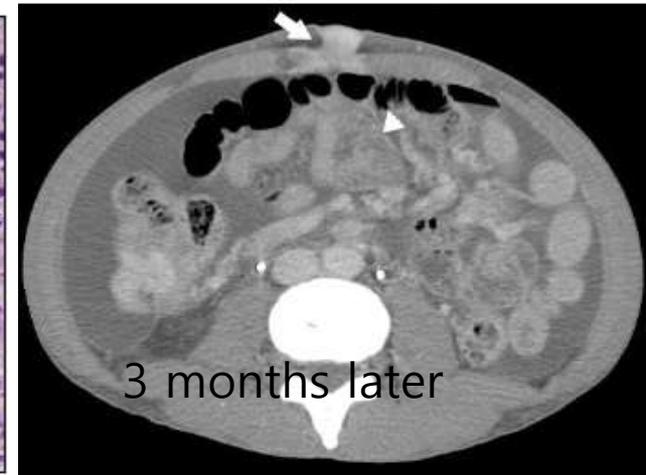
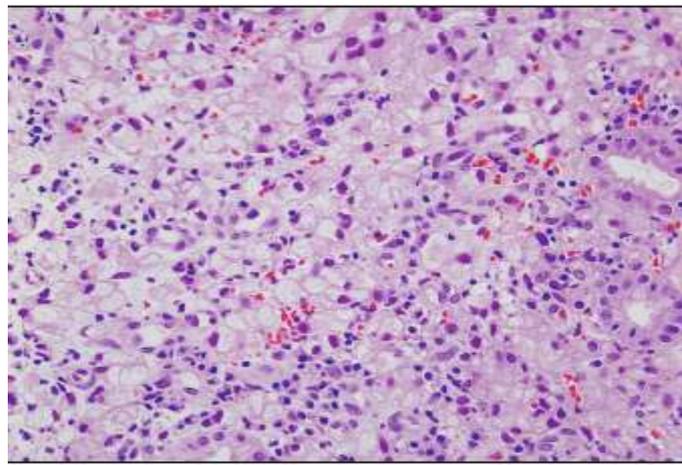
Surgical assistant of William J. Mayo at St. Mary Hospital

She drew Mayo's attention to the phenomenon, and he published an article about it in 1928, referring "pants button umbilicus".

This term was coined in 1949 by Hamilton Bailey (Physical signs in clinical surgery).



Male/48 yrs C.C.: umbilical pain



Krukenberg Tumor

Friedrich Ernst Krukenberg (1871-1946)

German physician

Described 5 cases of what he took to be unique form of ovarian neoplasia, signet-ring cells in a stroma of sarcoma : "*Über das Fibrosarcoma ovarii muco-cellulare (carcinomatodes)*" (1896)

Only later was this recognized as an anaplastic carcinoma metastatic from the stomach

Paget had described the process in 1854.



Whipple disease



George Hoyt Whipple (1878-1976)

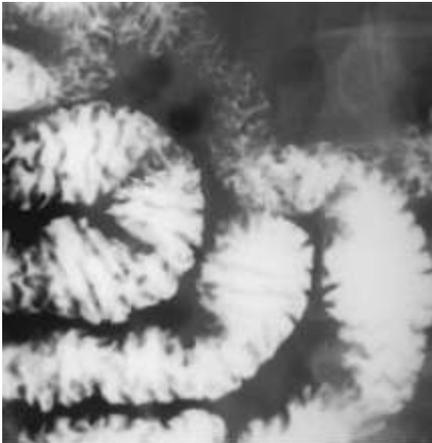
American pathologist

Described in meticulous detail the fatal course in a 36-year old medical missionary of a previously unrecognized "intestinal lipodystrophy" in 1907

Also correctly pointed to the bacterial cause of the disease in his original report

(A hitherto undescribed disease characterized anatomically by deposits of fat and fatty acids in the intestinal and mesenteric lymphatic tissues. Bulletin of the Johns Hopkins Hospital 18:382-393, 1907)

1934 Nobel Prize for discovery leading to the treatment of primary pernicious anemia with liver extract



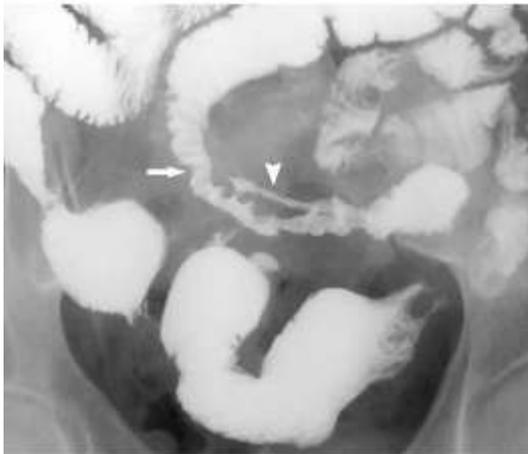
Crohn's disease



Burrill Bernard Crohn (1884-1983)

American gastroenterology

In 1932, Crohn and two colleagues, Leon Ginzburg and Gordon D. Oppenheimer, published an important paper describing the then-relatively unknown condition. Their seminal paper, "Terminal ileitis: A new clinical entity," documenting 14 cases. (JAMA 1932;99:1323)



The name of disease was changed to "Regional ileitis" on publication.
("Regional ileitis: A pathologic and clinical entity"
Mt Sinai J Med 67:263, 1932)

Crohn disease



- Louis XIII of France (1601-1643) suffered relapsing bloody diarrhea, fever, rectal abscess, small intestinal and colonic ulcers, and fistula beginning at age 20 years, most likely due to Crohn disease.
- The first reported case is ascribed to Giovanni B. Morgagni (1682-1771), who discussed the clinical course in a 20 year old man with a protracted, sometimes bloody diarrhea and colic pains. The patient dies from a perforation of the terminal ileum.
- Scottish physician T. Kennedy Dalziel in 1913
- Ileitis terminalis was first described by Polish surgeon Antoni Lesniowski in 1904.

Dieulafoy's Lesion

(Caliber-persistent artery)



Paul Georges Dieulafoy (1839-1911)

French surgeon

Described a gastric lesion that consists of a large and tortuous arteriole that penetrates the mucosa, become eroded, and causes bleeding

(Exulceratio simplex: Lecons 1-3, 1897)



Behçet's Syndrome



Halushî Behçet (1889-1948)

Turkish dermatologist

Triple-symptom complex; uveitis, erosion of gut mucosa, and ulceration of the genitalia

Silk road disease

First recognized the syndrome in 1924 and reported his research on the three cases of disease (Über rezidivierende Aphthosen durch ein Virus verursachte Geschwüre am Mund, am Auge, und an der Genitalien. *Derm Wschr* 105:1152, 1937)



Symptoms of this disease may have been described by Hippocrates in the 5th century BC

Peutz-Jeghers syndrome

(Hereditary intestinal polyposis syndrome)



Johannes Laurentius Augustinus Peutz (1886-1957)
Dutch physician

"Very remarkable case of familial polyposis of mucosa membrane of intestinal tract and nasopharynx accompanied by peculiar pigmentation of skin and mucosa membrane" (1921)



Dermal involvement had previously been described by JT Connor in 1895, when he reported the cutaneous manifestations in identical twin girls, who subsequently died of complications of intussusception (at age 20 years) and of carcinoma of the breast (at age 52 years), respectively. (Lancet 2:1169)



Harold J. Jeghers (1904-1990): American physician

"Generalized intestinal polyposis and melanin spots of the oral mucosa, lips and digits. A syndrome of diagnostic significance". N Engl J Med 1949;241:993

Gardner's Syndrome



Eldon John Gardner (1909-1989)

American geneticist

Familial adenomatous polyposis in a large Utah kindred, accompanied by fibrous dysplasia of the skull and osteofibroma and marked by a propensity to cancer of the colon

(A genetic and clinical study of intestinal polyposis, a predisposing factor for carcinoma of the colon and rectum. *Am J Hum Genet* 1951;3:167)

Lloyd KM, Dennis M. Cowden's disease. A possible new symptom complex with multiple system involvement.
Ann Intern Med 58:136, 1963

Cronkhite LW, Canada WJ. Generalized gastrointestinal polyposis; an unusual syndrome of polyposis, pigmentation, alopecia and onychotrophy. N Engl J Med 252:1011, 1955

Turcot J, Despres JP, Pierre F. Malignant tumors of the central nervous system associated with familial polyposis of the colon and bright green urine which may be related to vegetables in the diet: report of two cases. Dis Colon Rectum 2:465, 1959

Lynch HT, Shaw MW, Magnuson CW, Larsen AL, Krush AJ. Hereditary factors in cancer. Study of two large midwestern kindreds. Arch Intern Med 117:206, 1966

Stent

Charles Thomas Stent (1807-1885)

English dentist



In 1847, Edwin Truman introduced gutta-percha (a gummous substance derived from the sap of a Malaysian tree) for use in making dental impressions, but this proved unsatisfactory.

He undertook to overcome the defects by adding to some substances and the result was marketed as "Stent's mass" that used by generations of dentists as a template in the manufacture of dentures.

Soon the term "stent" was applied to any supporting entheses.

Foramen Bochdaleki



Vincent Alexander Bochdalek(1801-1883)

Moravian anatomist

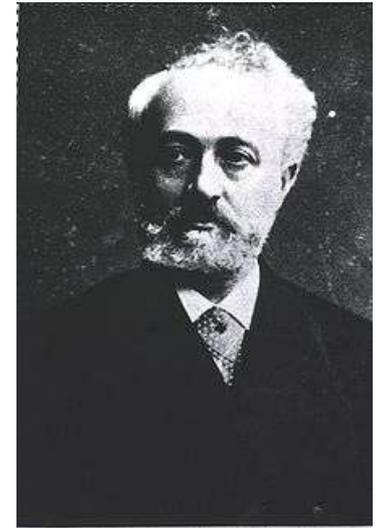
Description of the developmental defect in the posterolateral portion of the diaphragm, the site of often fatal herniation (1848)

Auerbach plexus (myenteric plexus)

Leopold Auerbach (1828-1897) German anatomist and neuropathologist

Plexus myentericus Auerbachii that he discovered, a layer of ganglion cells, which, from their localization between the layers of the muscle control the movements of the GI tract

(*Ueber einen Plexus myentericus*. Virchow Arch Anat Physiol 1864)

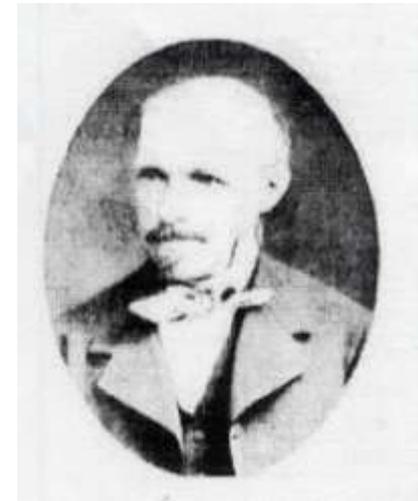


11-47 Leopold Auerbach. Courtesy of the University of

Meissner plexus (submucosal plexus)

Georg Meissner (1829-1905) German anatomist

Plexus submucosus, Ueber die Nerven der Darmwand in 1857



Brunner's Glands (Pancreal gland)



Johann Conrad Brunner (1653-1727)

Switzerland anatomist

Published his "*Dissertatio inauguralis de glandulis duodeno intestino* (1687)

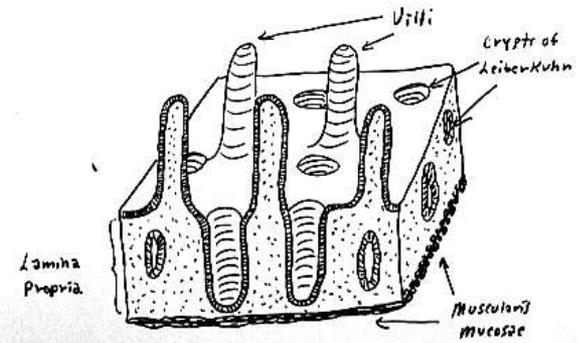
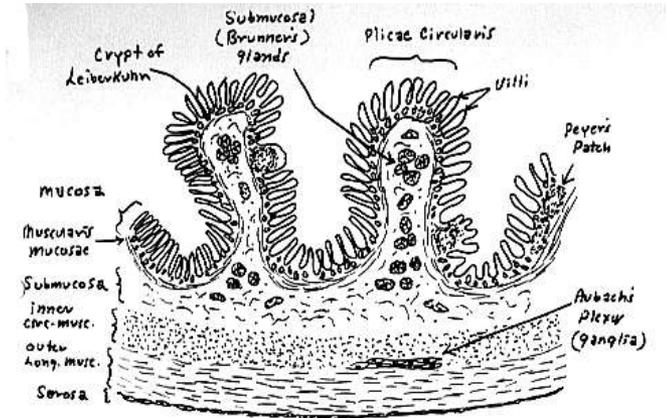
J.J. Wepfer, previously described the glands of the duodenal mucosa in 1679

Bildersammlung aus der Geschichte der Medizin.



Belohnung der Tugend.

Crypts of Lieberkühn (Intestinal glands)



Johann Nathanael Lieberkuhn (1711-1756)

German anatomist

Description of the crypt-like architecture of the intestinal epithelium

De fabrica et actione volorum intestinorum tenuium hominis in 1745

Peyer's Patches

Johann Conrad Peyer (1653-1712)

Switzerland anatomist

First observed follicular aggregates in the mucosa of the small intestine (1673)

Supposed the patches secreted a digestive juices

Published *Exercitatio anatomico-medica de glandulis intestinorum earumque usu et affectionibus* in 1677

Only later were the aggregates defined as lymphoid tissue and recognized as a component of the enteric immune system

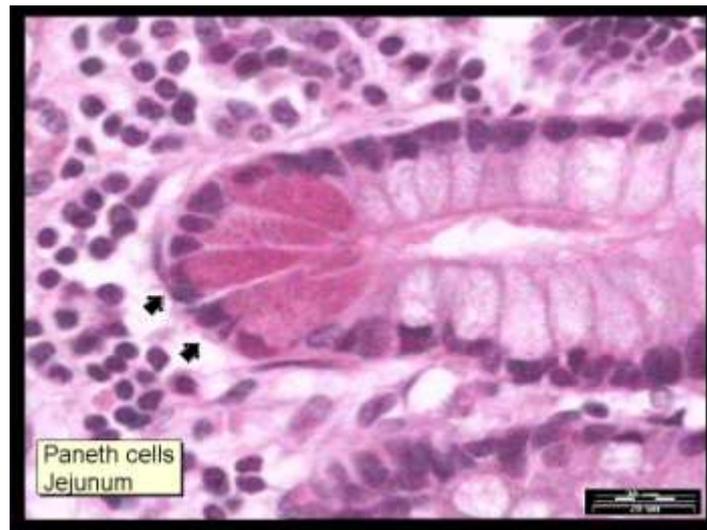


Paneth Cells

Josef Paneth (1857-1890)

Austrian physiologist

Described the unique epithelial cells that contain large secretory granules and occupy the fundus of the glands of Lieberkuhn (1888)



Yersinia Infection



Alexandre Emile John Yersin (1863-1943)

Switzerland bacteriologist

Discovery of the *Yersinia pestis*, causative agent of plague

Discovery of *Yersinia enterocolitica*, the cause of acute enteritis and mesenteric adenitis in man and animals

His illustrious career ended with his death, during World War II, at Nha Trang in Vietnam where candles and incense still burn at his grave.

Shigellosis



Kiyoshi Shiga (1870-1957)

Japanese physician

He reported discovery of the pathogenic organism that caused a common form of bacillary dysentery in 1897

At first, Shiga's claim was challenged in the German medical literature, but was soon confirmed.

Escherichia coli



Theodor Escherich (1857-1911)

German microbiologist

At first he chose to devote his career to pediatrics. Stimulated by the work of Robert Koch, he acquired skills in the burgeoning field of bacteriology.

He published a monograph on the intestinal bacterial flora of infants in which he described a number of new types of organisms in 1886.

Salmonellosis



Daniel Elmer Salmon (1850-1914)

American veterinarian

In 1886 he identified what he called the bacterium of swine plaque, later recognized as the prototype of the genus.

Chagas' disease

Carlos Justiniano Ribeiro Chagas (1879-1934)



Brazilian microbiologist

In 1906 he joined his friend Oswald Cruz (1871-1917) at the newly established institute dedicated to eradication of debilitating infectious diseases.

Identified new species of trypanosome that he named *cruzi* and acute form of American trypanosomiasis.

A relatively obscure doctor working under primitive conditions in an undeveloped country, could identify a disease that threatened millions, provides an inspiring chapter in the history of medicine.