



Escola Politécnica da Universidade de São Paulo

PTC 5874

Sistema Cardio-respiratório

HENRIQUE TAKACHI MORIYA



APRESENTAÇÃO

- **Sala D2-01**
- **3091-1723**
- **htmoriya@gmail.com**
- **Moodle**

ALUNOS

- **Formação**
- **Por que PG?**
- **Projeto**
- **Orientador**

DISCIPLINA

- **Noções de:**
 - **Anatomia**
 - **Fisiologia**
 - **Patologias**
 - **Medições fisiológicas**
 - **Pesquisas científicas**

DISCIPLINA

- **Avaliação**
 - **Exercícios semanais (ES)**
 - **Prova (P)**

- **Média (M)**

$$M = \frac{ES + P}{2}$$

DISCIPLINA

- **Cronograma**
 - 12/09/2016 – Aula 01
 - Anatomia do sistema respiratório
 - 19/09/2016 – Aula 02
 - Anatomia do sistema respiratório
 - 26/09/2016 – Aula 03
 - Fisiologia do sistema respiratório

DISCIPLINA

➤ Cronograma

- 03/10/2016 – Aula 04
 - Fisiologia do sistema respiratório
- 10/10/2016 – Aula 05
 - Ventilação mecânica
- 17/10/2016 – NÃO HAVERÁ AULA
 - CBEB

DISCIPLINA

➤ Cronograma

- 24/10/2016 – Aula 06
 - Ventilação mecânica
- 31/10/2016 – Aula 07
 - Avaliação da mecânica respiratória
- 07/11/2016 – Aula 08
 - Avaliação da mecânica respiratória

DISCIPLINA

➤ Cronograma

- 14/11/2016 – NÃO HAVERÁ AULA
 - Recesso
- 21/11/2016 – Aula 09
 - Aula prática (ICB)
- 28/11/2016 – Aula 10
 - Sistema cardiovascular

DISCIPLINA

➤ Cronograma

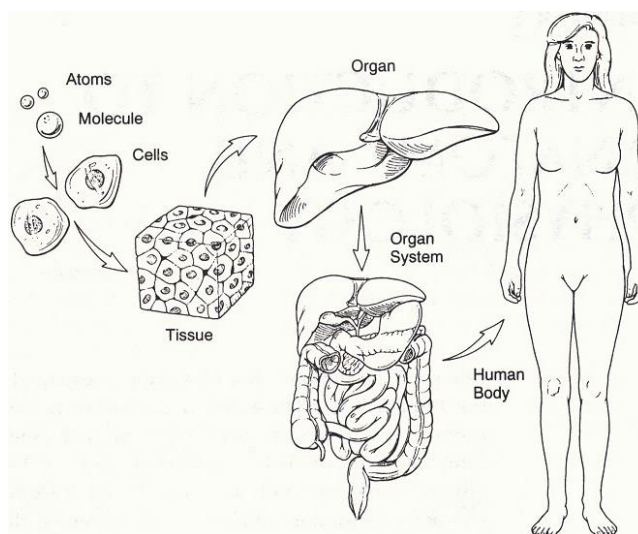
- 05/12/2016 – Aula 11
 - Sistema cardiovascular
- 12/12/2016 – Aula 12
 - Exame Final

DEFINIÇÕES

➤ Anatomia

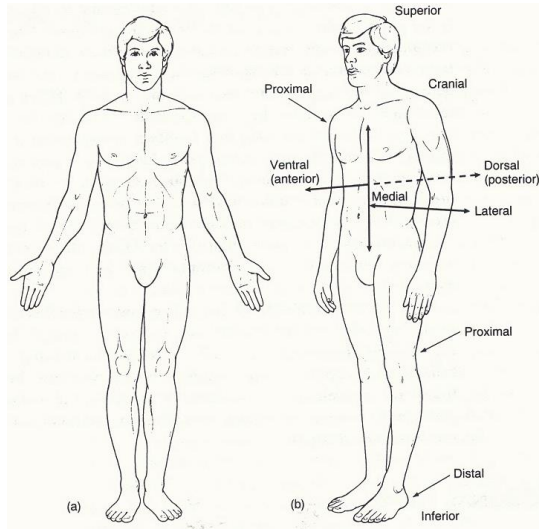
- ✓ Ciência que estuda a estrutura do corpo

NÍVEIS DE ESTRUTURA



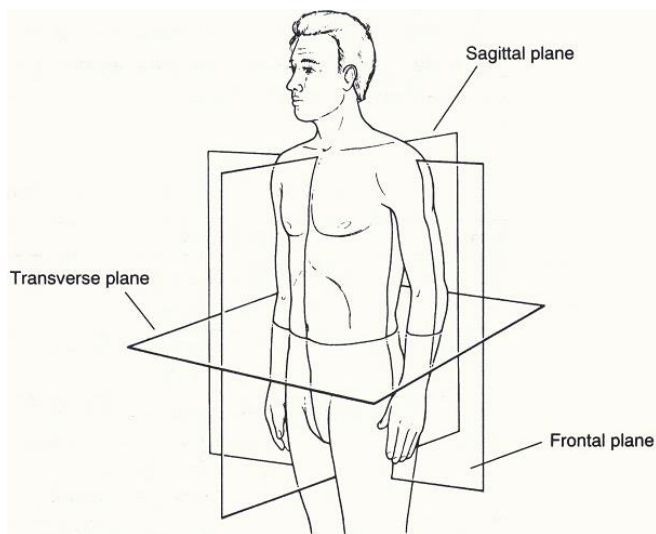
Alcarno, I. E. Anatomy & physiology the easy way. Barron's, 1996.

DIREÇÕES



Alcama, I. E. Anatomy & physiology the easy way. Barron's, 1996.

PLANOS

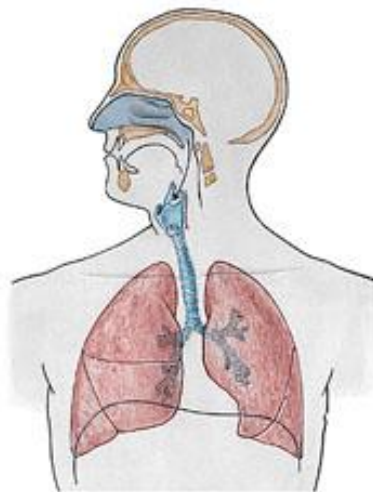


Alcama, I. E. Anatomy & physiology the easy way. Barron's, 1996.

ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO

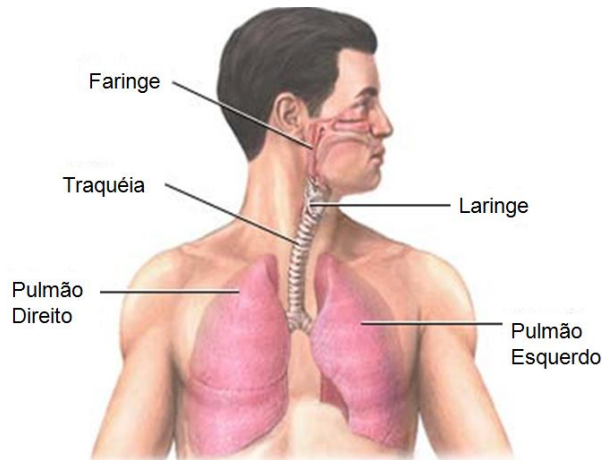
- Vias de condução
- Vias de transição
- Caixa torácica

ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO

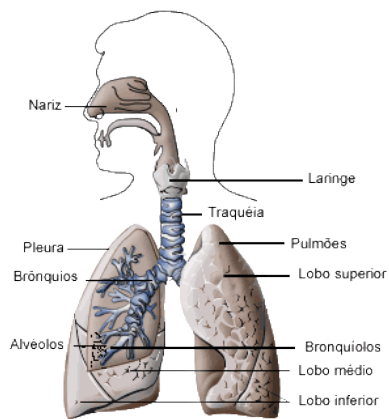


(www.auladeanatomia.com). Acesso em 01 de Maio de 2011

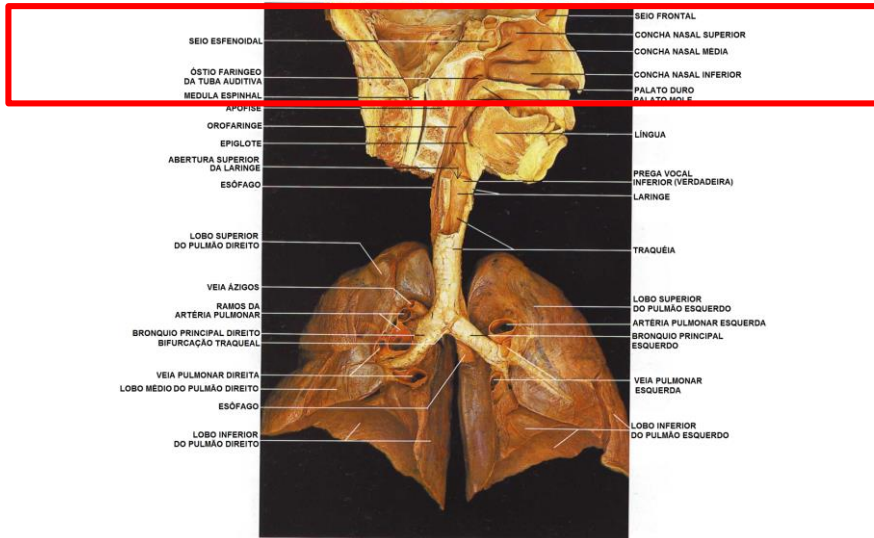
ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO



ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO

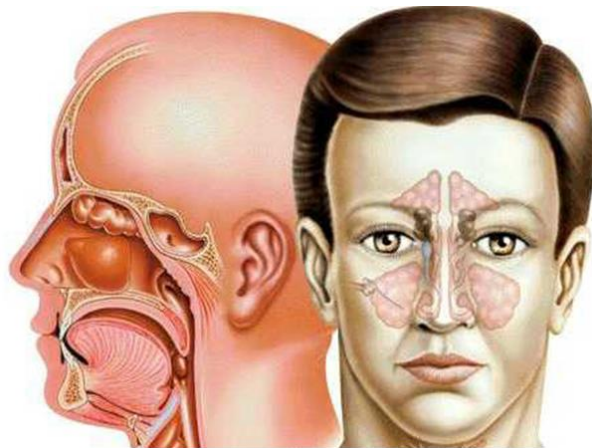


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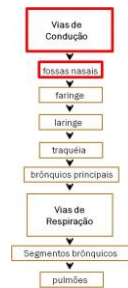


Modificado a partir: Atlas Fotográfico do Corpo Humano - YOKOCHI e ROHEN, 1991

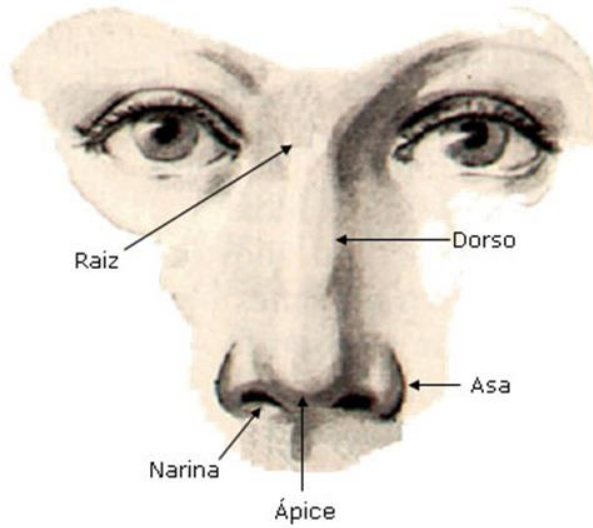
FOSSAS NASAIS



(www.auladeanatomia.com). Acesso em 01 de Maio de 2011



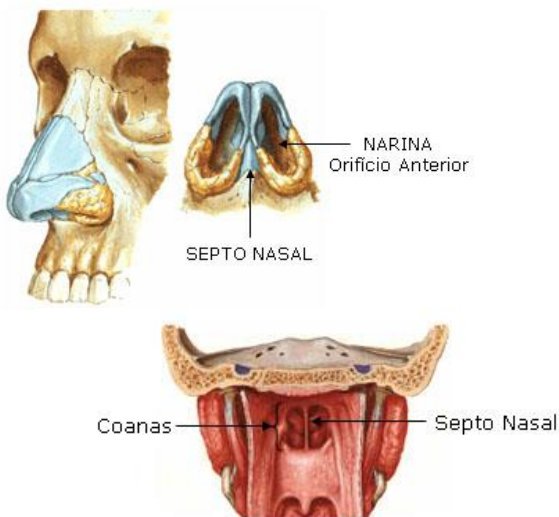
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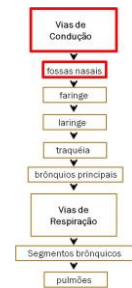
(www.auladeanatomia.com). Acesso em 01 de Maio de 2011



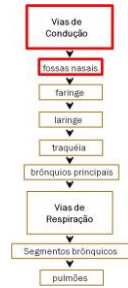
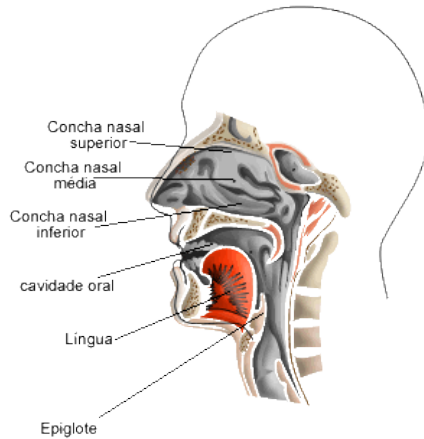
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(www.auladeanatomia.com). Acesso em 01 de Maio de 2011

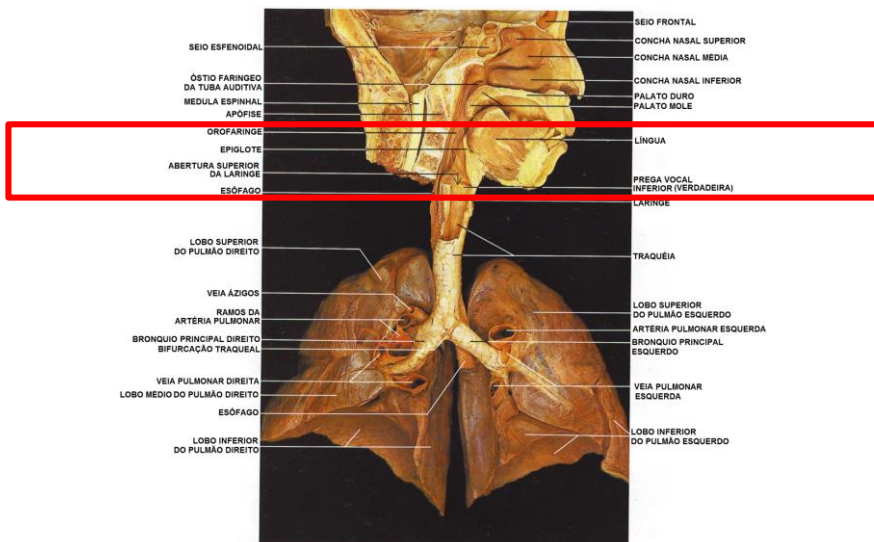


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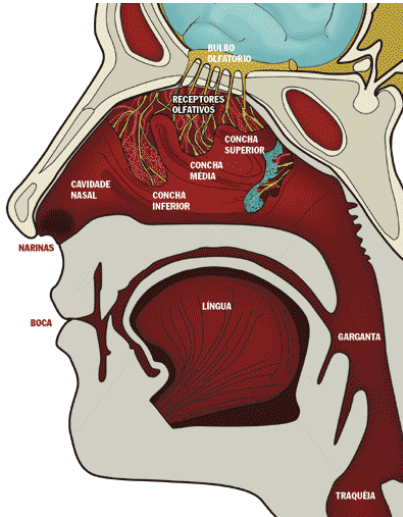
(<http://prof-julia.blogspot.com/2010/09/orgaos-do-sistema-respiratorio.html>) Acesso em 25/04/11

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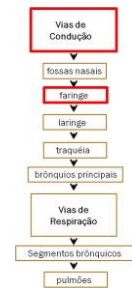
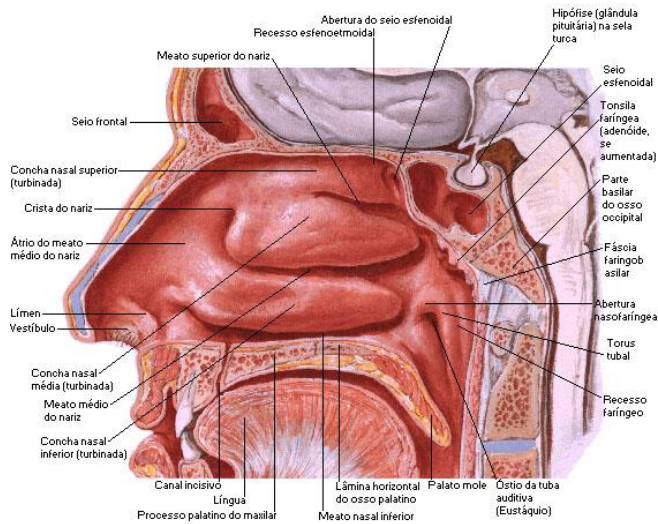
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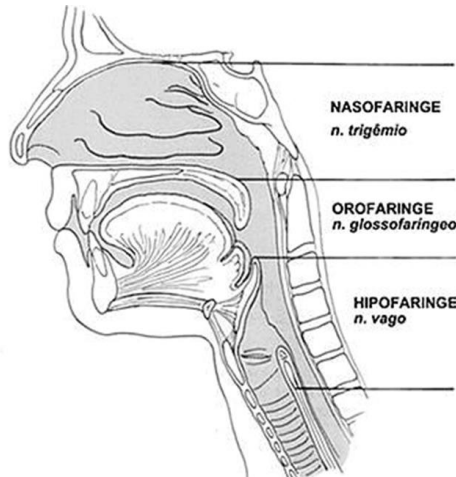
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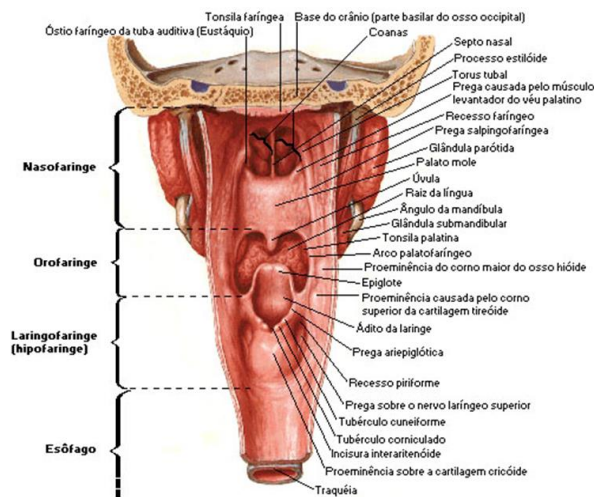
NETTER, Frank H. Atlas de Anatomia Humana. 2ed. Porto Alegre: Artmed, 2000.

FARINGE



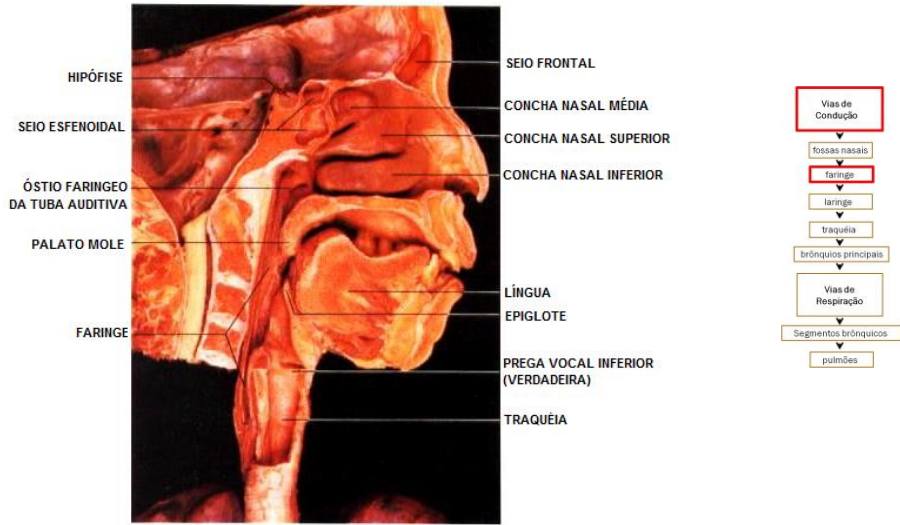
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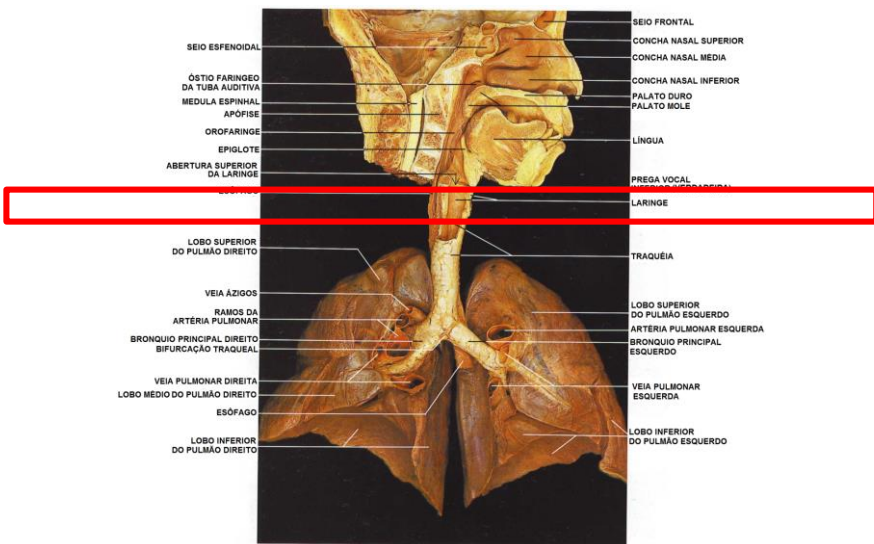
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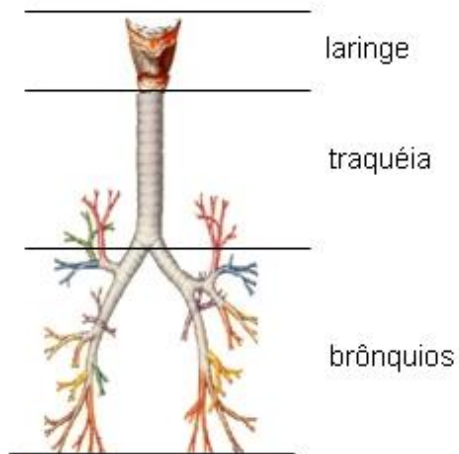
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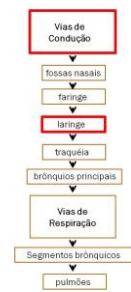
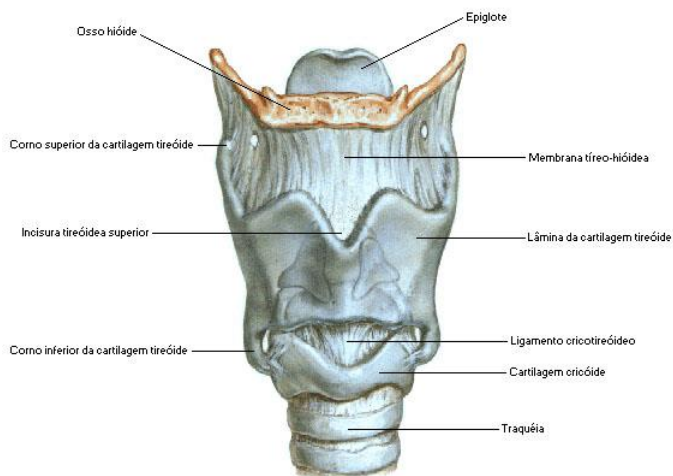
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LARINGE



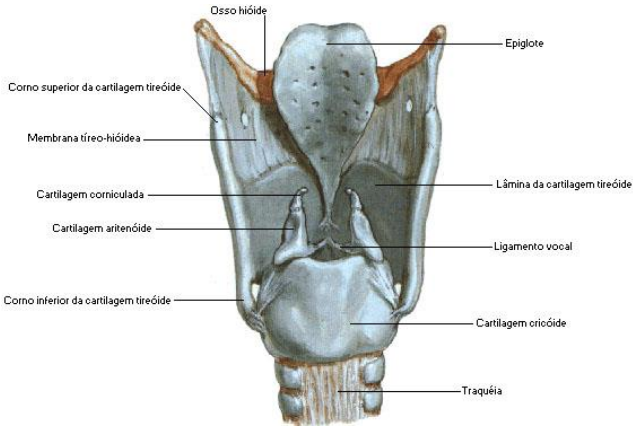
NETTER, Frank H., Atlas de Anatomia Humana, 2ed. Porto Alegre: Artmed, 2000.

LARINGE



NETTER, Frank H., Atlas de Anatomia Humana, 2ed. Porto Alegre: Artmed, 2000.

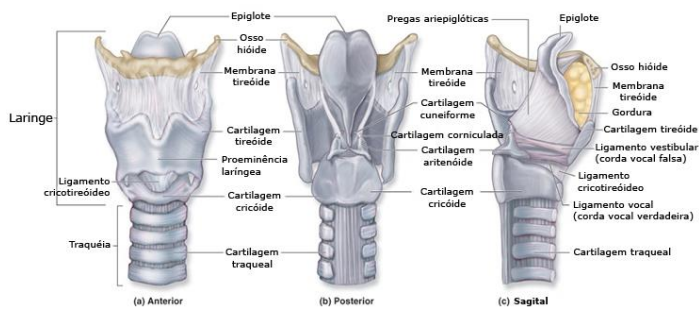
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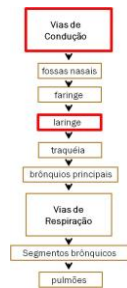
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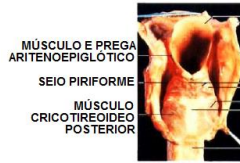
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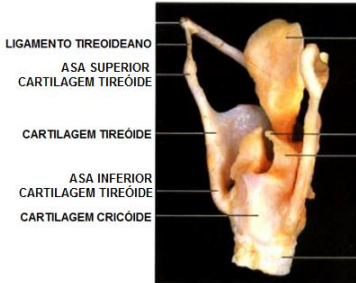


LÂMINA
MÚSCULO CRICOTIREÓIDEO
CARTILAGEM CRICOIDEA



MÚSCULO E PREGA ARITENOEPIGLÓTICO
SEIO PIRIFORME
MÚSCULO CRICOTIREÓIDEO POSTERIOR

EPIGLOTE
OSSO HIÓIDE
CARTILAGEM TIREÓIDE
MÚSCULO ARITENOÍDEO
MÚSCULO CRICOTIREÓIDEO
CARTILAGEM CRICOIDEA
TRAQUÉIA



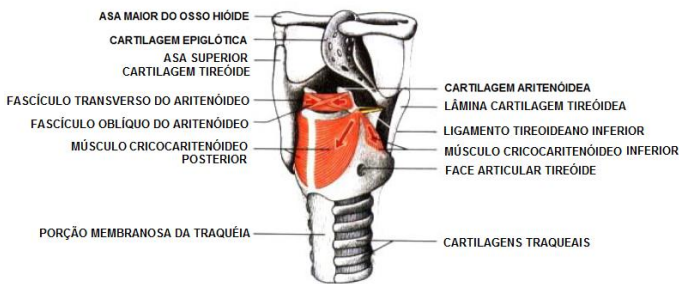
LIGAMENTO TIREÓIDEANO
ASA SUPERIOR
CARTILAGEM TIREÓIDE
CARTILAGEM TIREÓIDE
ASA INFERIOR
CARTILAGEM TIREÓIDE
CARTILAGEM CRICÓIDE

CARTILAGEM CORNICULADA
CARTILAGEM ARITENOÍDEA
TRAQUÉIA

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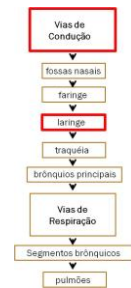
LARINGE



ASA MAIOR DO OSSO HIÓIDE
CARTILAGEM EPIGLÓTICA
ASA SUPERIOR
CARTILAGEM TIREÓIDE
FASCÍCULO TRANSVERSO DO ARITENOÍDEO
FASCÍCULO OBLÍQUO DO ARITENOÍDEO
MÚSCULO CRICOCARITENOÍDEO POSTERIOR
PORÇÃO MEMBRANOSA DA TRAQUÉIA

CARTILAGEM ARITENOÍDEA
LÂMINA CARTILAGEM TIREÓIDEA
LIGAMENTO TIREÓIDEANO INFERIOR
MÚSCULO CRICOCARITENOÍDEO INFERIOR
FACE ARTICULAR TIREÓIDE
CARTILAGENS TRAQUEAIS

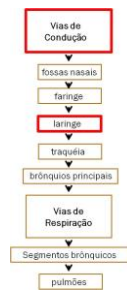
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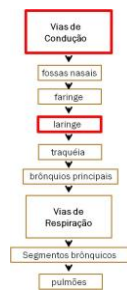
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(www.auladeanatomia.com). Acesso em 01 de Maio de 2011



LARINGE

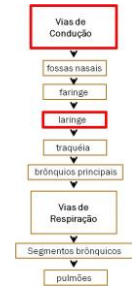


Epiglote

Pregas Vocais

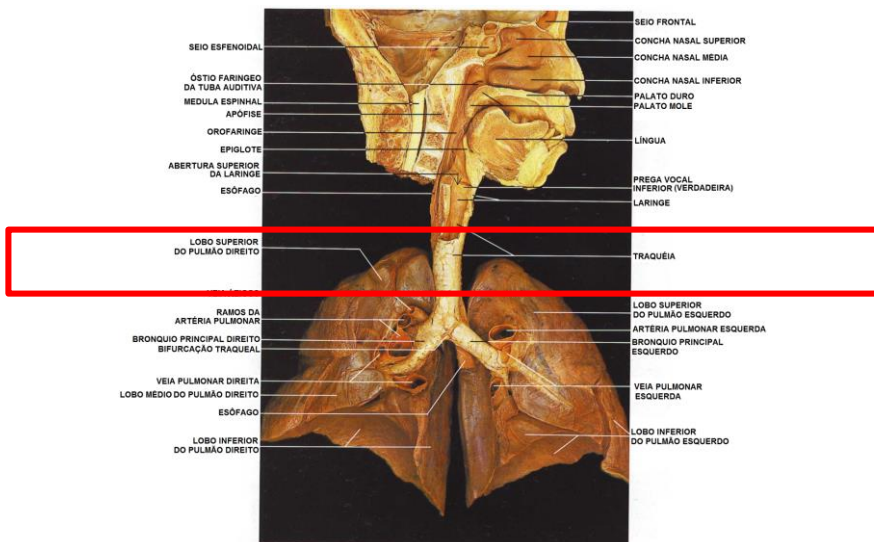
Aritenoides

Esôfago



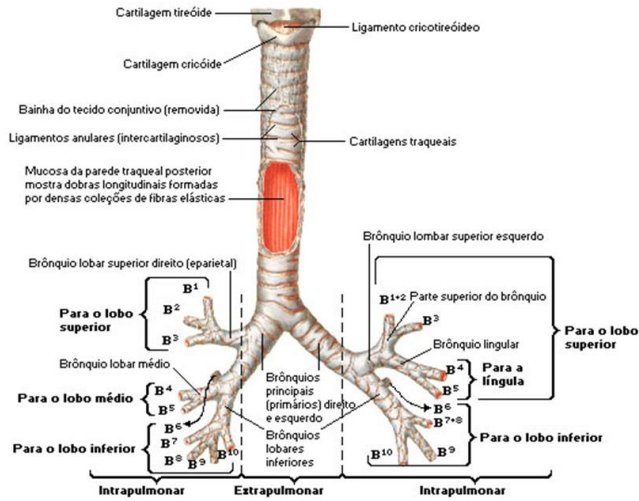
(www.ibb.unesp.br/nadi/Museu2_qualidade/Museu2_corpo_humano/Museu2_como_funciona/Museu_homem_nervoso/Museu2_homem_nervoso_audicao/imagens/cordas_anatomia.jpg) - Acesso em 01 de Maio de 2011

ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO



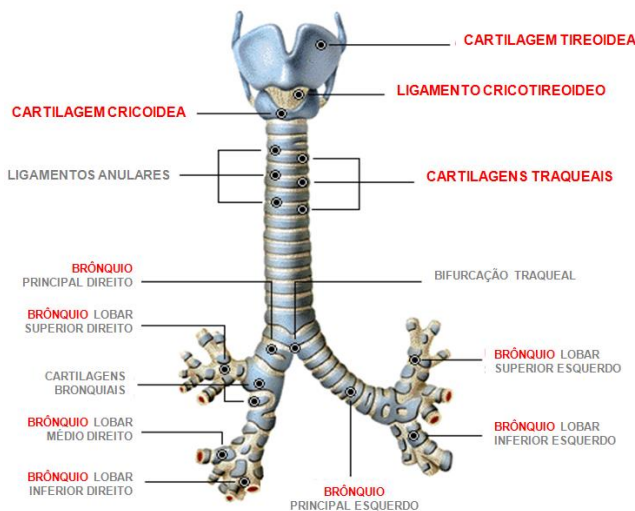
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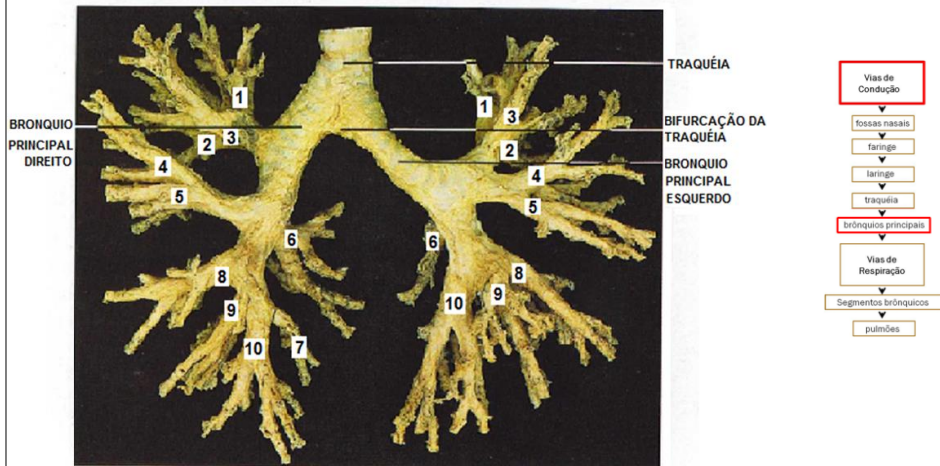
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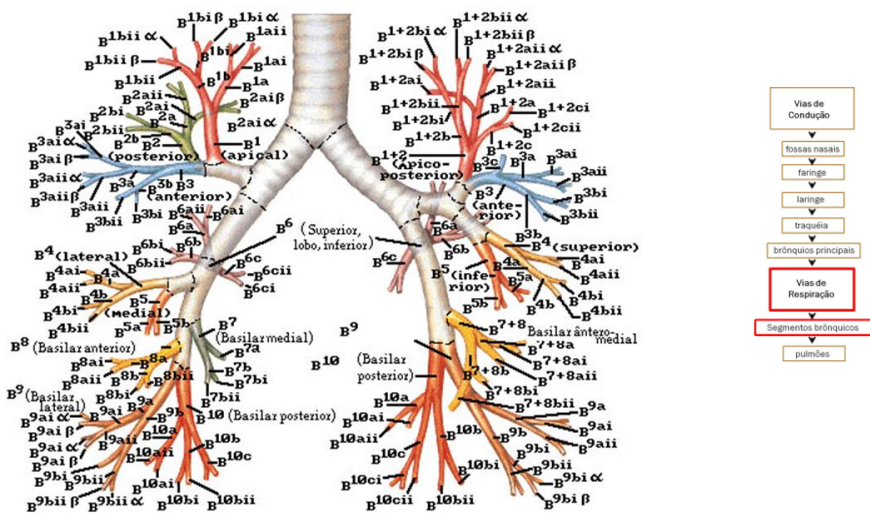
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BRÔNQUIOS PRINCIPAIS



Modificado a partir: Atlas Fotográfico do Corpo Humano - YOKOCHI e ROHEN, 1991

SEGMENTOS BRÔNQUICOS



(www.auladeanatomia.com). Acesso em 01 de Maio de 2011

SEGMENTOS BRÔNQUICOS

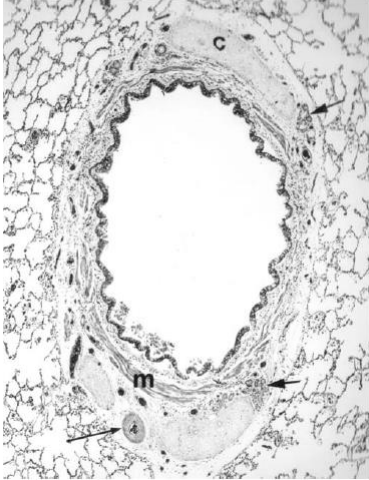


FIGURE 1-1 Conducting airway (hematoxylin-eosin stain). Subsegmental bronchus showing cartilage (c), mucous glands (short arrows), bronchial artery (long arrow), and muscle (m). Reproduced with permission from Fraser RS, Müller NL, Colman N, Paré PD, Diagnosis of Diseases of the Chest, IV edition. Philadelphia: WB Saunders; 1999.



SEGMENTOS BRÔNQUICOS

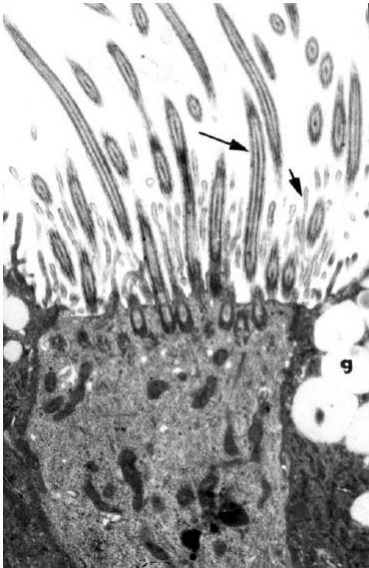
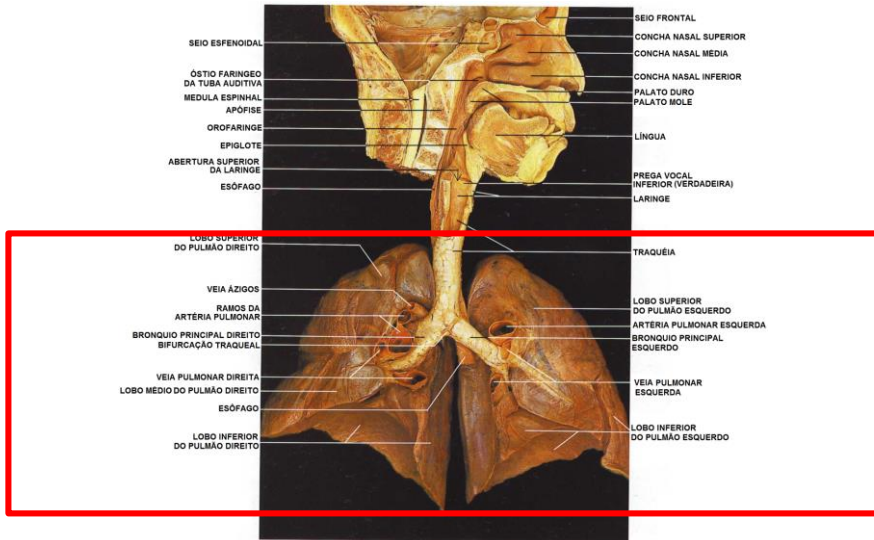


FIGURE 1-3 Ciliated cell (electron micrograph). Apical portion of cell showing cilia (long arrow) and microvilli (short arrow). Secretory granules (g) of a goblet cell can be seen in the adjacent cell. Reproduced with permission Fraser RS, Müller NL, Colman N, Paré PD, Diagnosis of Diseases of the Chest, IV edition. Philadelphia: WB Saunders; 1999.



ANATOMIA DO SISTEMA RESPIRATÓRIO HUMANO



Modificado a partir: Atlas Fotográfico do Corpo Humano - YOKOCHI e ROHEN, 1991

PULMÕES

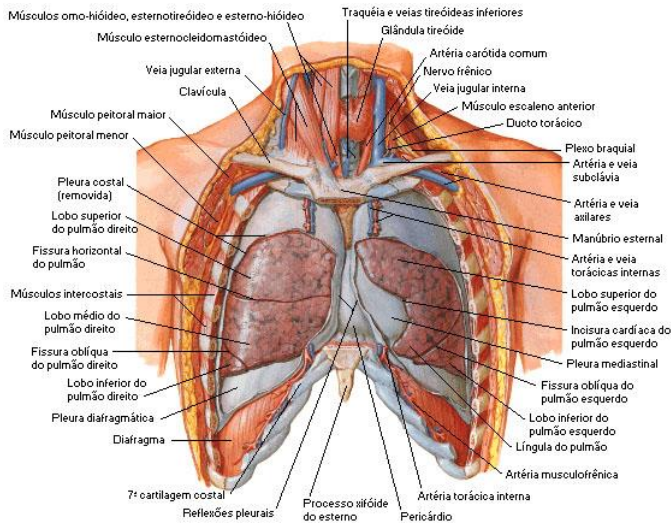
PULMÃO DIREITO	
Brônquio Lobar	Brônquio Segmentar
Superior	Apical
	Posterior
	Anterior
Médio	Lateral
	Medial
Inferior	Superior
	Basal medial
	Basal anterior
	Basal lateral
	Basal posterior

PULMÃO ESQUERDO		
Brônquio Lobar	Divisão	Brônquio Segmentar
Superior	Divisão Superior	Apico-posterior
	Divisão Inferior (Lingula)	Anterior
Inferior		Superior
		Inferior

Superior
Basal ântero-medial
Basal lateral
Basal posterior



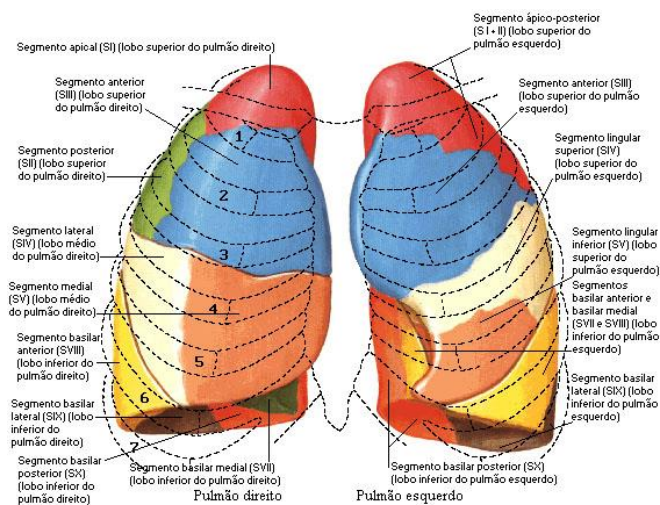
PULMÕES



NETTER, Frank H. Atlas de Anatomia Humana. 2ed. Porto Alegre: Artmed, 2000.



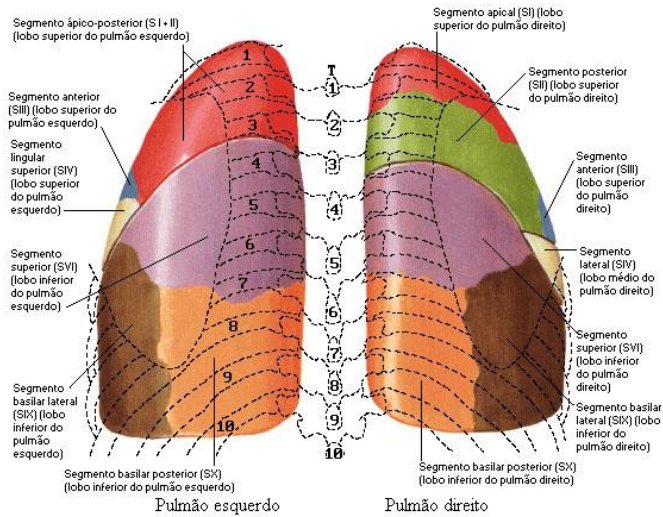
PULMÕES



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PULMÕES



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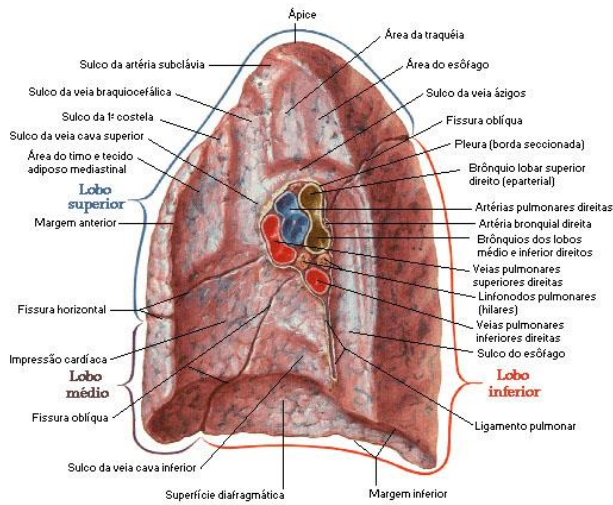
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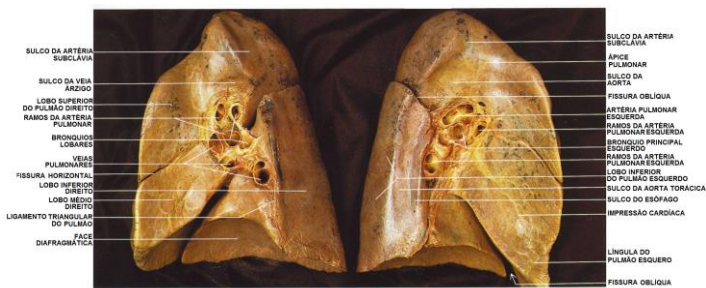
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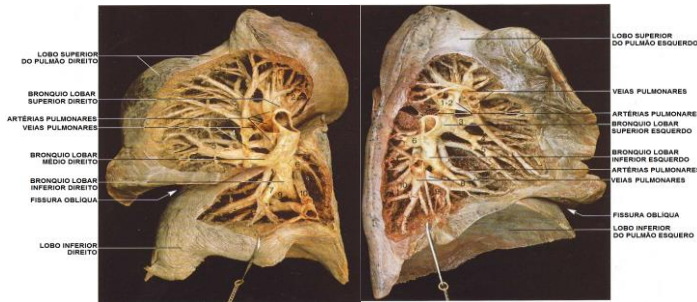
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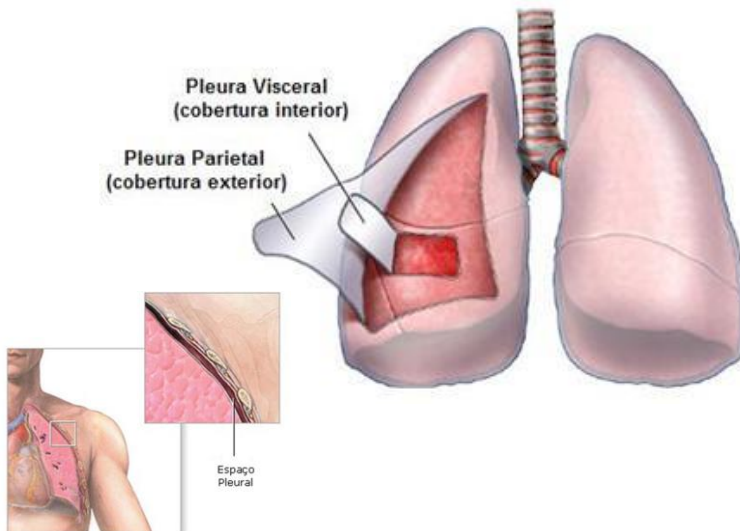
PULMÕES



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PULMÕES

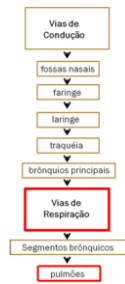
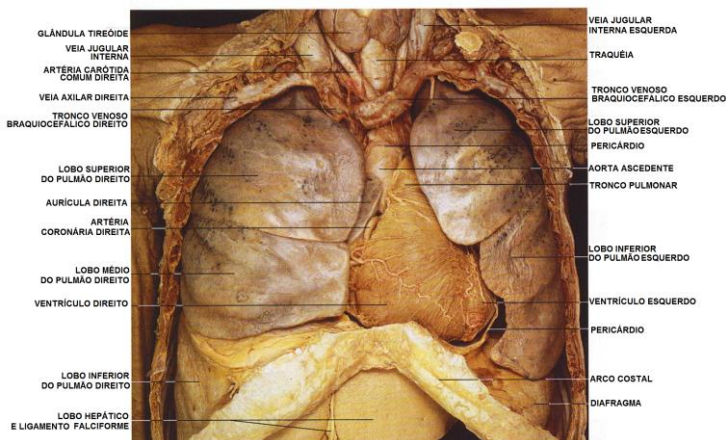


(www.derramepleural.com/sistema-respiratorio-anatomia.html) Acesso em 25/04/11

PLEURA



PULMÕES

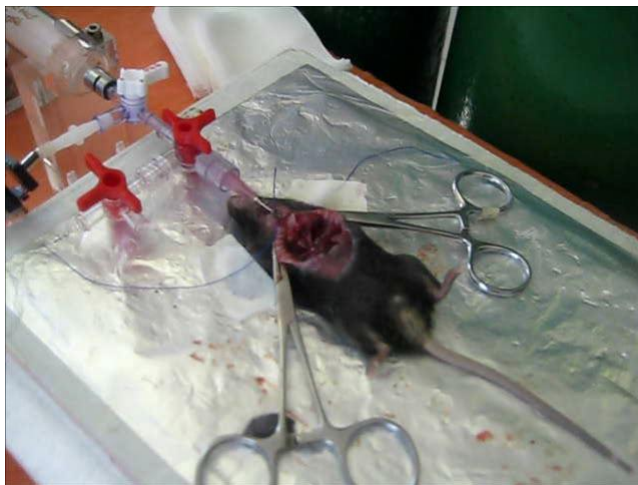


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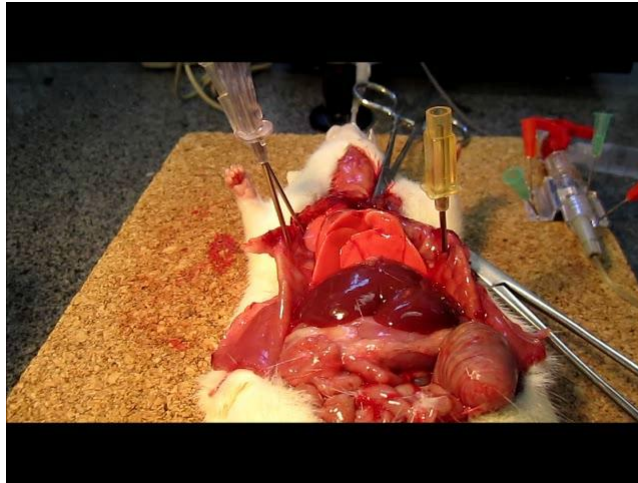
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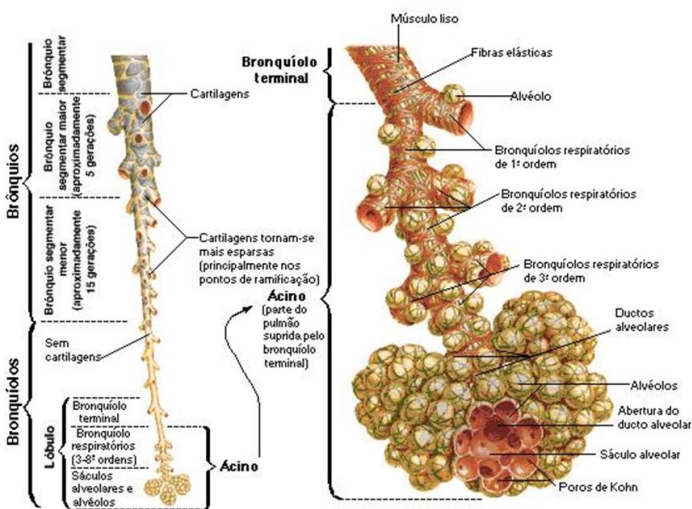
PULMÕES



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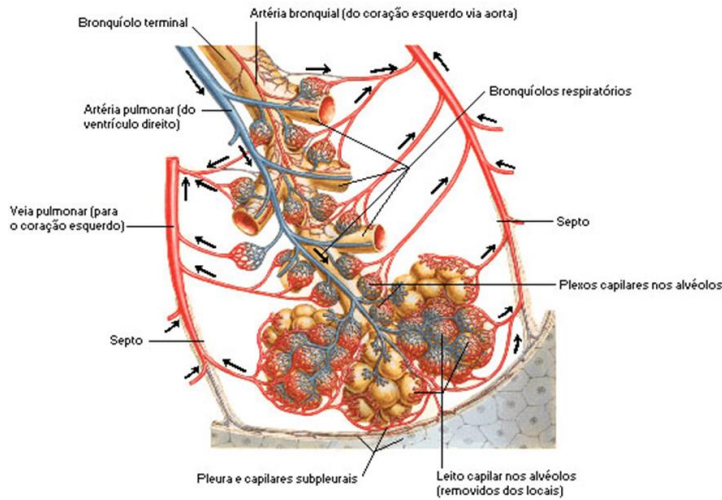


ALVÉOLOS



NETTER, Frank H. Atlas de Anatomia Humana. 2ed. Porto Alegre: Artmed, 2000.

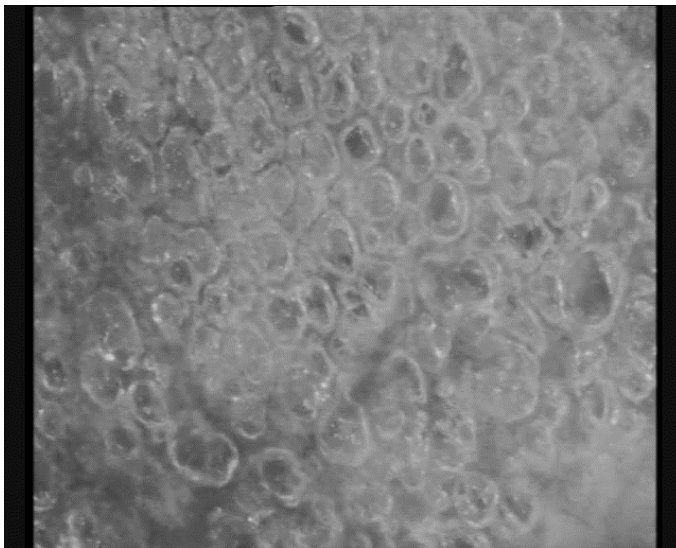
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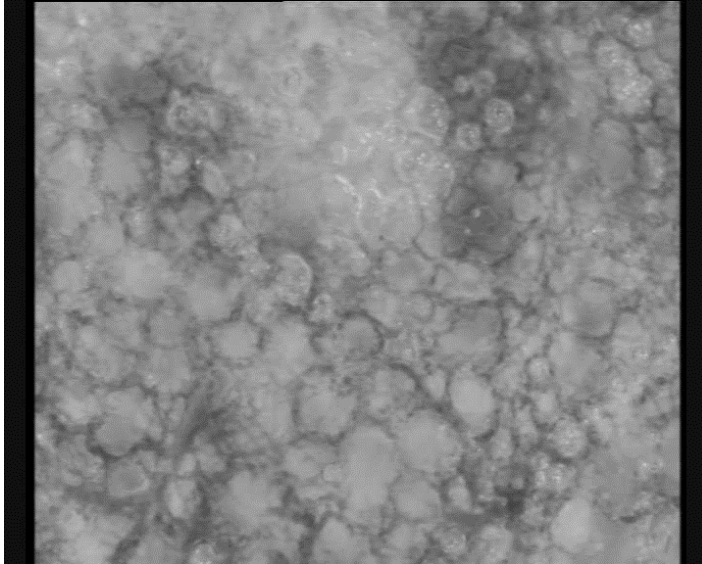
NETTER, Frank H. Atlas de Anatomia Humana. 2ed. Porto Alegre: Artmed, 2000.



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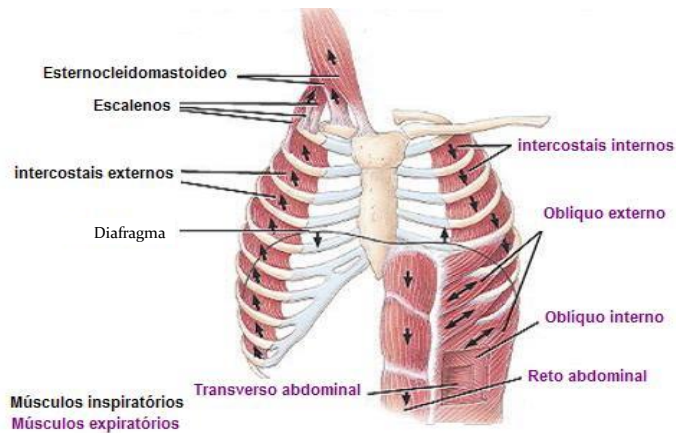


CAIXA TORÁCICA



(<http://gabi-superblogspot.blogspot.com/>) Acesso em 25/04/11

CAIXA TORÁCICA



(www.medicinageriatrica.com.br/2007/09/30/doencas-da-parede-toracica/) Acesso em 25/04/11

EXERCÍCIO SEMANAL

- **Apresentação**
 - **Anatomia sistema respiratório**
 - **Animais de experimentação**
 - **Referência/Fonte**
 - **htmoriya@gmail.com**