

Singing Through the Transition

Dr. Ryan Olsen
Baker University
ryan.olsen@BakerU.edu

Slides available at www.ryanaolsen.com/handouts

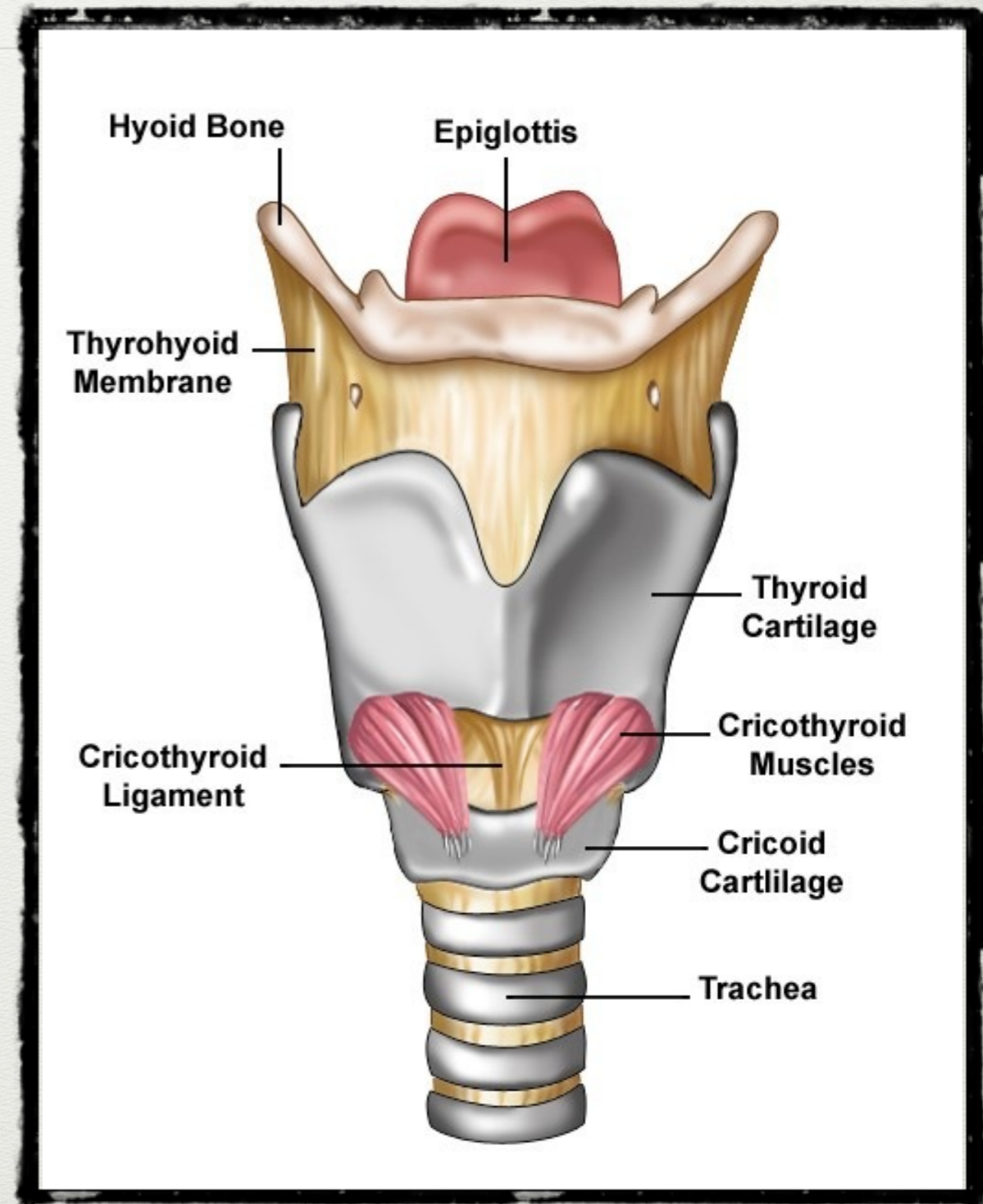
Pronouns: He/Him/His



- Brief review of vocal anatomy and what physically happens in the main regions of vocal production during adolescence
- What happens during a voice "crack?"
- What about the transgender voice change?
- Exercises to help students use their new instrument, match pitch, and access registers

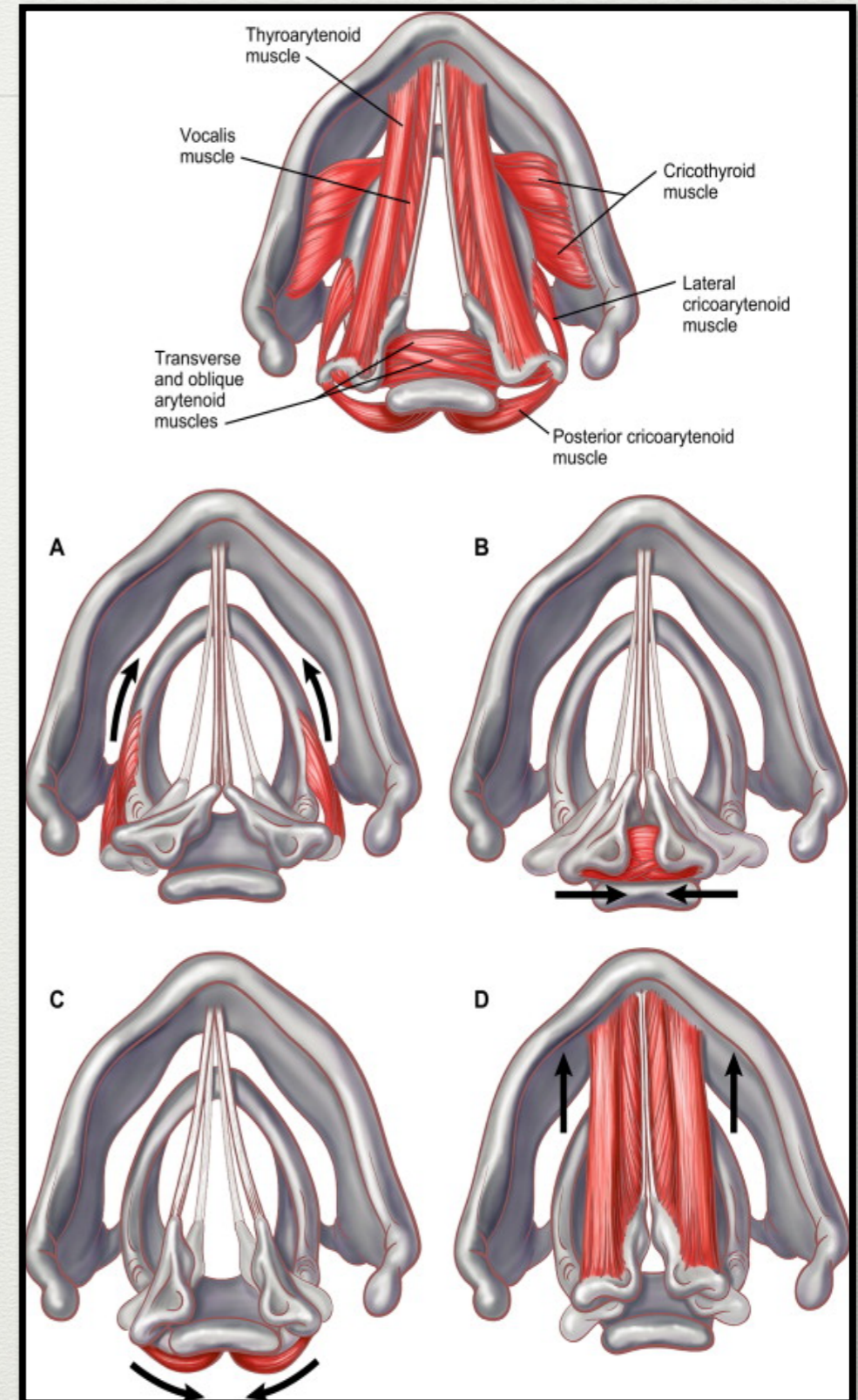
Structures of the Larynx

- Hyoid bone acts as suspension system
- Tongue connects to hyoid bone
- Hyoid bone hinges upward when swallowing
- Cricothyroid pulls and tenses thyroid in order to lengthen vocal folds and raise pitch
- Boys' larynx grows more anterior to posterior than girl's to account for more length and thickness of vocal folds (Adam's Apple)

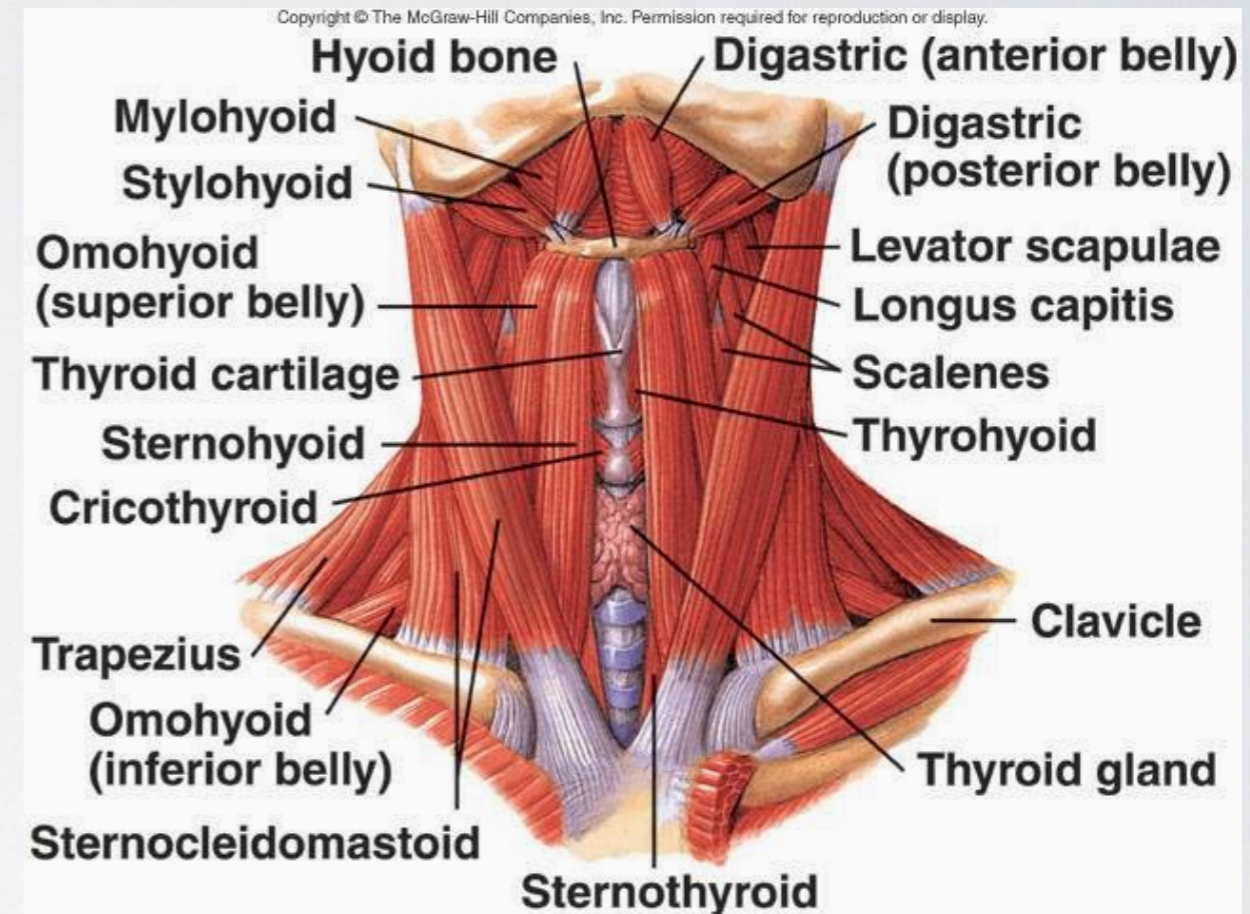


Top view of larynx

- B - Interarytenoids - bring two arytenoids together to close rear portion of the glottis (weakness causes mutational chink in girls)
- D - Thyroarytenoid (scientific name for part of the vocal folds) muscle also lowers pitch by thickening vocal folds (less involved than cricothyroids)
- Unchanged voices avg of 2mm of vibrational length. Adult females avg 10mm and male avg 16mm vibrational length



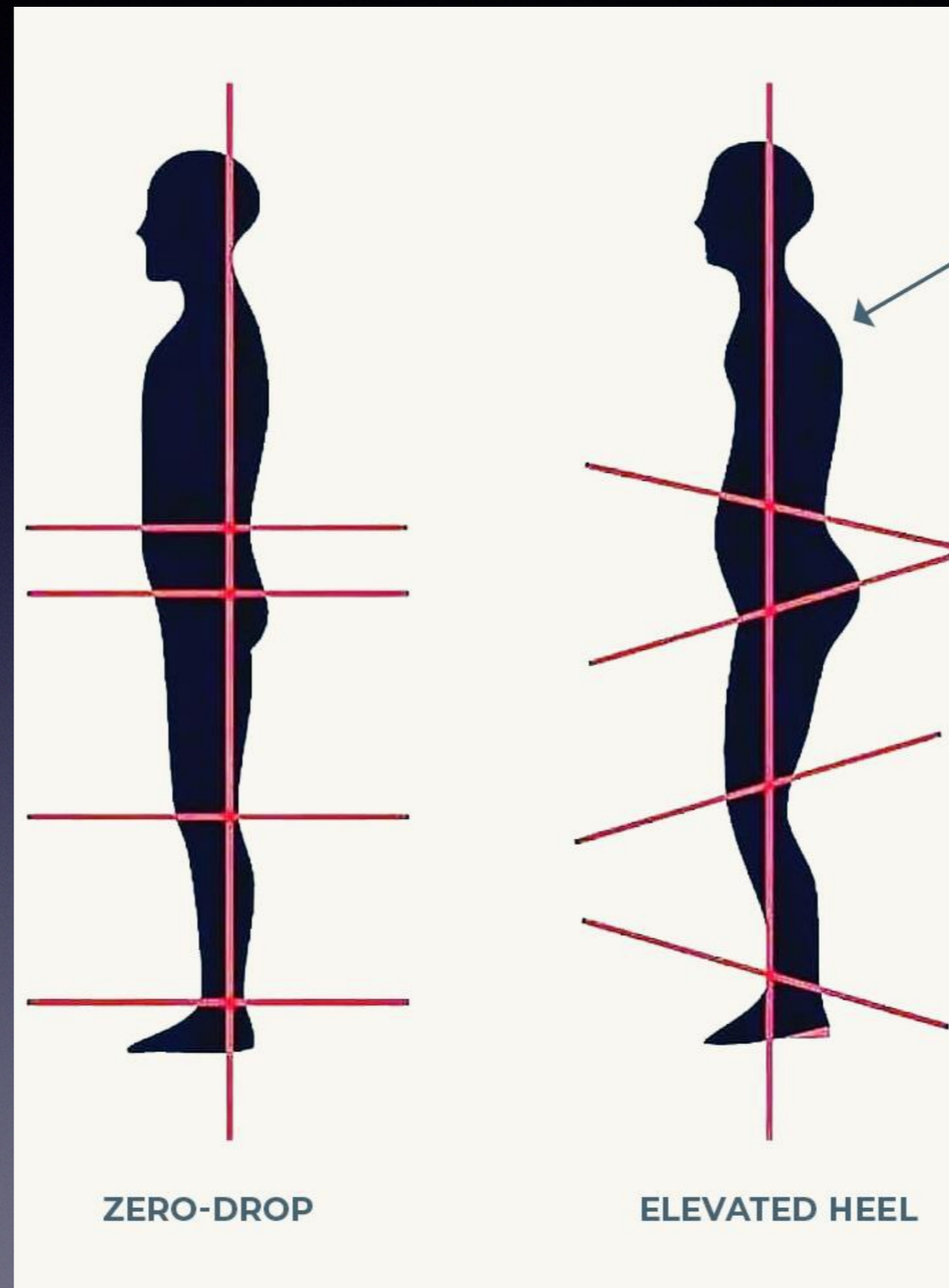
- Raising/jutting chin pulls vocal tract and raises larynx
- Pulling head back depresses larynx
- Tongue tension can raise larynx
- Pulling tongue back can depress larynx and create false, dark tone
- Turning head in order to see conductor can tense muscles and pull vocal tract
- Sing [a] while rotating head and neck, then raise, lower, and jut chin
- Tongue rolls & lip buzzes





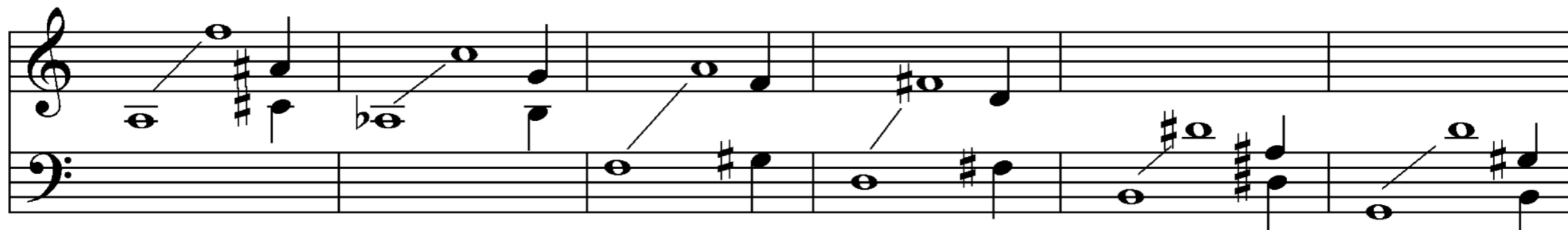
<http://www.nydailynews.com/life-style/health/texting-puts-pounds-pressure-spine-study-article-1.2013885> (August 2016)

How shoes can impact alignment



Stages of the Boys' Changing Voice (research of John Cooksey)

Quarter notes indicate average tessituras.



Stage I
Unchanged

Stage II
Midvoice

Stage III
Midvoice II

Stage IV
Midvoice IIA

Stage V
New Baritone

Stage VI
Developing Baritone

Note: falsetto emerges during Midvoice IIA, indicating the peak of the change process

- Boys' voices progress through above stages
- Some pass quickly through a stage, some linger
- Can take one to two years to complete (avg 14 months)
- Speaking fundamental frequency lies approx m3 above lowest singing range
- Lower range tends to be more stable while upper range fluctuates dramatically

The Transgender Voice

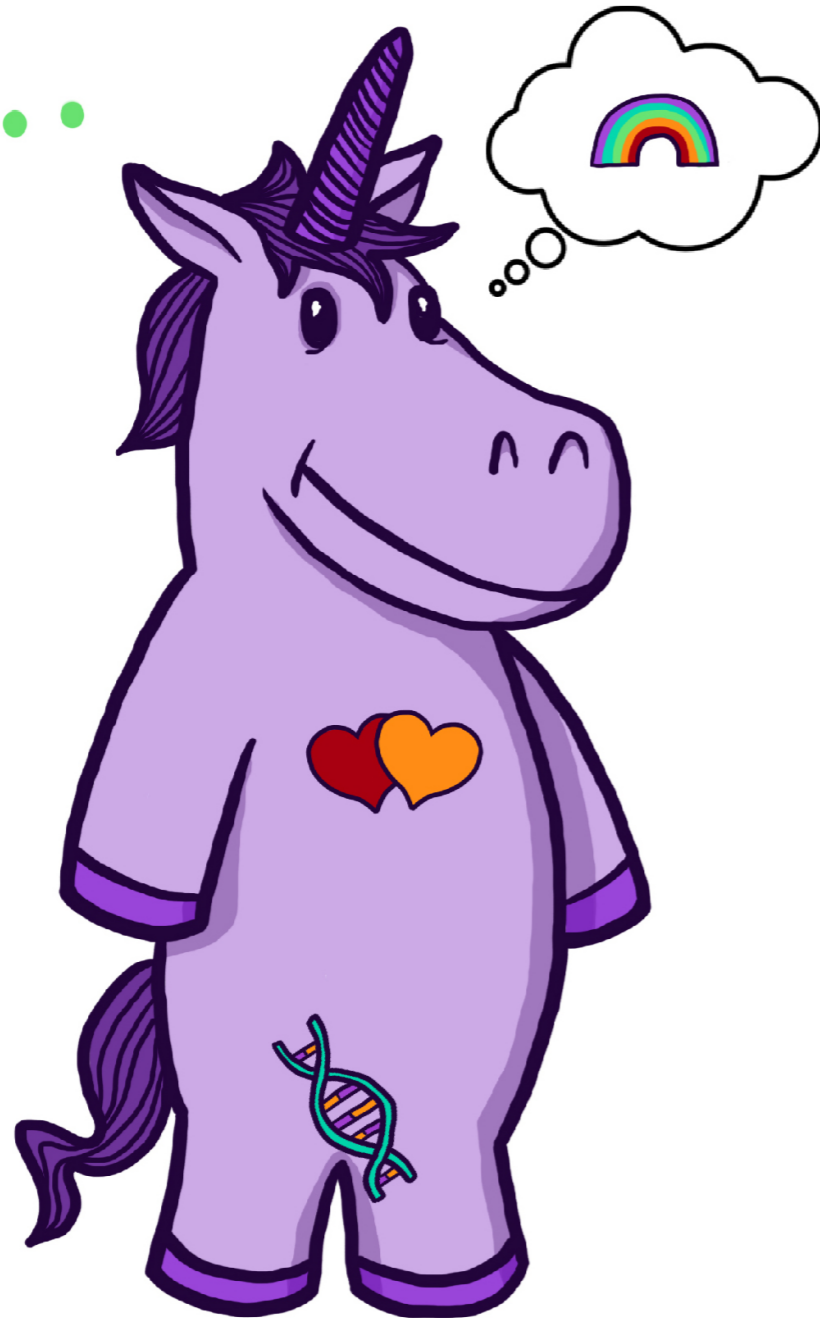
- Anatomy/physiology during puberty matters
- Trans men
 - Administration of testosterone will cause vocal folds to thicken but not lengthen
 - Lower doses will transition into tenor range, while higher doses to baritone or bass
 - Larynx, vocal tract and other resonators do not grow
 - Singing in low chest range can help ease the transition as long as not frying or straining
- Trans women can't significantly change range after puberty without surgery (risky) or therapy (primarily for speech)
- Voice Dysphoria
- *The Singing Teacher's Guide to Transgender Voices* by Liz Jackson Hearn & Brian Kremer, Plural Publishing, 2018.
- Training the Transgender Singer: Finding the Voice Inside By Shelagh Davies posted to [NATS.org](http://www.nats.org/cgi/page.cgi/article.html/What_s_New/Training_the_Transgender_Singer_Finding_the_Voice_Inside) on 1:45 PM, April 14, 2016 http://www.nats.org/cgi/page.cgi/article.html/What_s_New/Training_the_Transgender_Singer_Finding_the_Voice_Inside
- Shelagh Davies, Viktória G. Papp & Christella Antoni (2015) Voice and Communication Change for Gender Nonconforming Individuals: Giving Voice to the Person Inside, *International Journal of Transgenderism*, 16:3, 117-159, DOI: 10.1080/15532739.2015.1075931 <http://dx.doi.org/10.1080/15532739.2015.1075931>

MEET HOLDEN MADAGAME, TRANSGENDER OPERA SINGERS




- ▶ Introduction Video <https://www.youtube.com/watch?v=PTtk-DIJ22c>
- ▶ 6 Weeks on T <https://www.youtube.com/watch?v=YkpHpOn4Tb0>
- ▶ 7 Months on T <https://www.youtube.com/watch?v=mbJk746OF1s>
- ▶ 16 Months on T <https://www.youtube.com/watch?v=BqaO196y9M8>

The Gender Unicorn

Graphic by:
TSER
Trans Student Educational Resources



Gender Identity

-  Female / Woman / Girl
-  Male / Man / Boy
-  Other Gender(s)

Gender Expression

-  Feminine
-  Masculine
-  Other

Sex Assigned at Birth

-  Female
-  Male
-  Other/Intersex

Physically Attracted to

-  Women
-  Men
-  Other Gender(s)

Emotionally Attracted to

-  Women
-  Men
-  Other Gender(s)

To learn more, go to:
www.transstudent.org/gender

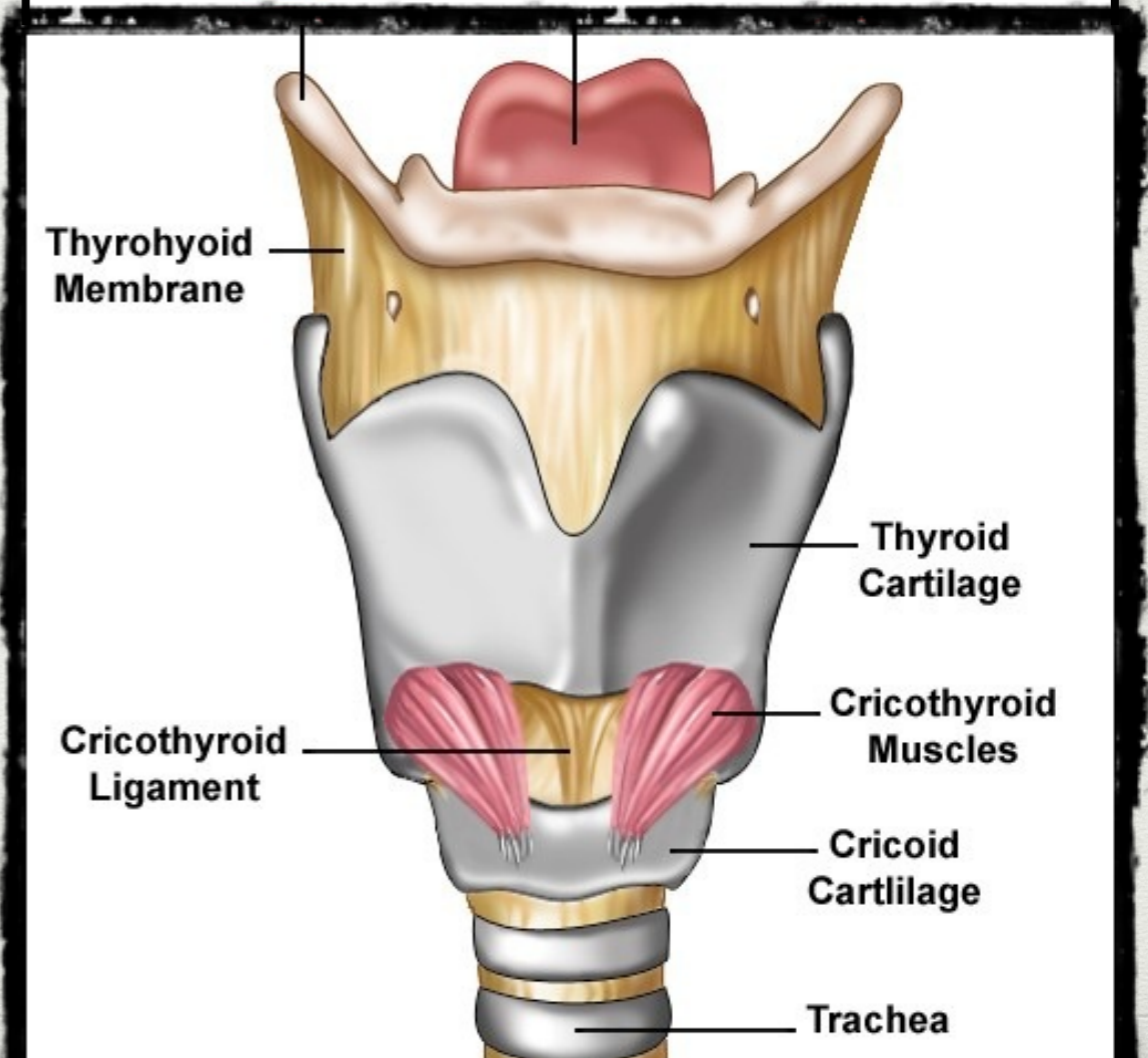
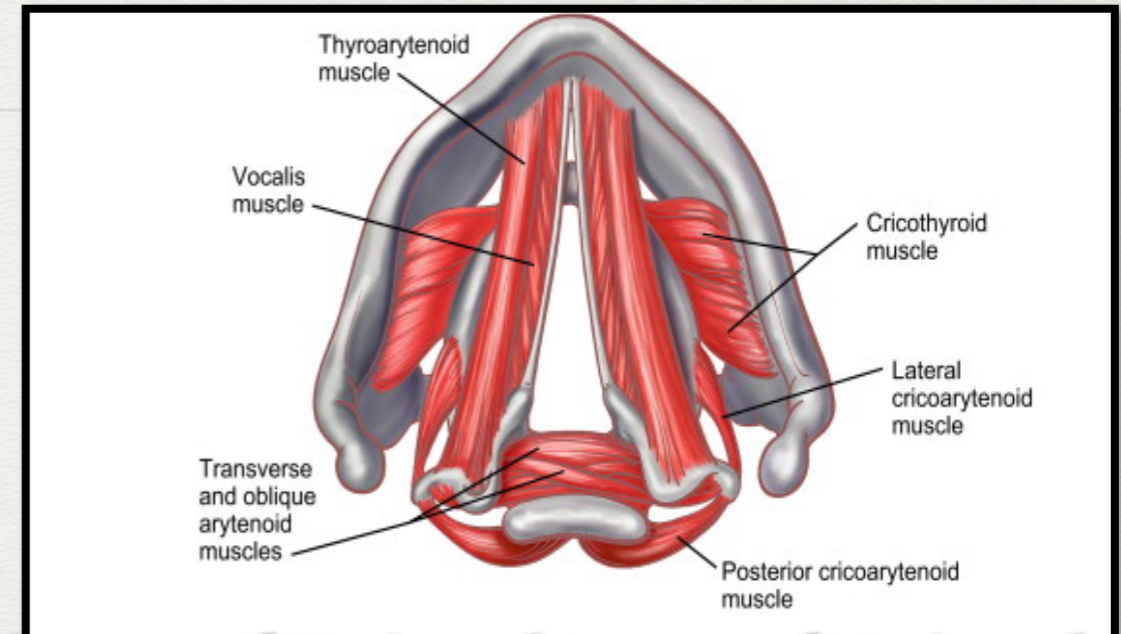
Design by Landyn Pan and Anna Moore

Psycho-Social Concerns

- Adolescence is a time of physical and social struggle and discovery
- Refer to voice parts by their technical names rather than gender pronouns
 - Be aware of gendered speech habits (you guys, be a man, man up)
 - Consider gender neutral ensemble names
- Place students in sections based upon voice range rather than gender (esp. MS!)
- Consider concert black or gender-neutral concert attire
- Be conscious of gender specific language in repertoire

What happens during a voice crack?

- Abrupt register transition
- Musculature can't maintain tension and force release
- Muscles reengage after register transition
- Similar to manual transmission
- Can actually be beneficial in learning where a voice's passaggio points are located



Exercises & Techniques

- Guitar peg
- Find Speaking Fundamental Frequency (SFF)
- Track and train the registration shifts
- Play fundamental frequency in left hand
- Double melody/pitches to be matched an octave (or two) higher
- Chart vocal progress weekly or bi-weekly
- Keep them singing, but make music fit their voice not vice versa