

SENSORY PERCEPTION EXPERIENCE

A Guided Wine Tasting

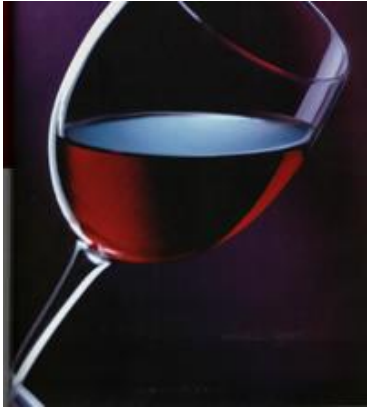
YOUR GUIDES



Craig Senders, MD
owner, Senders Wine



Maggie Kuhn, MD MAS
WSET, level 2



I. WINE & OTOLARYNGOLOGY

Historical Perspectives



BORDEAUX WINE CLASSIFICATION OF 1855

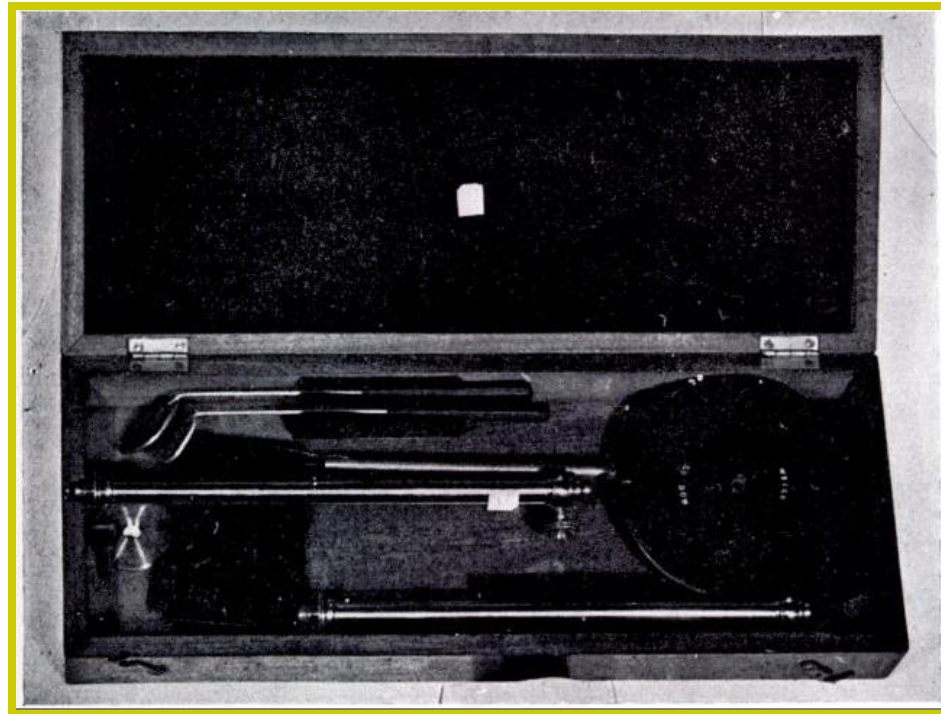
- First Growths
 - Lafite-Rothschild
 - Latour
 - Margaux
 - Haut-Brion
- Second Growths
 - Mouton-Rothschild*
- Third Growths
- Fourth Growths
- Fifth Growths

*Decreed a First Growth in 1973



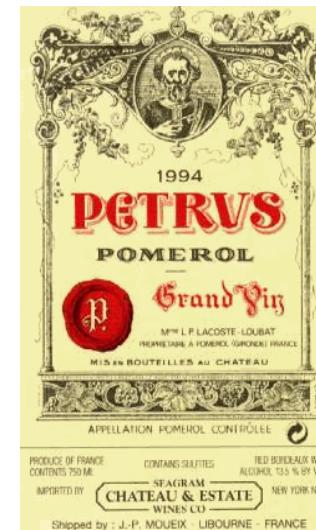
LANDMARK IN OTOLARYNGOLOGY

- Head mirror introduced by Czernak in **1855**



IMPORTANT DATES IN BORDEAUX

- 1855
 - Classification of the Grand Crus of the Gironde
- 1878-1890
 - Devastation by *Phylloxera vastatrix*
- 1986
 - St Emilion Official Classification
 - First Growths
 - Ausone
 - Cheval-Blanc
- Pomerol
 - Never classified
 - Petrus



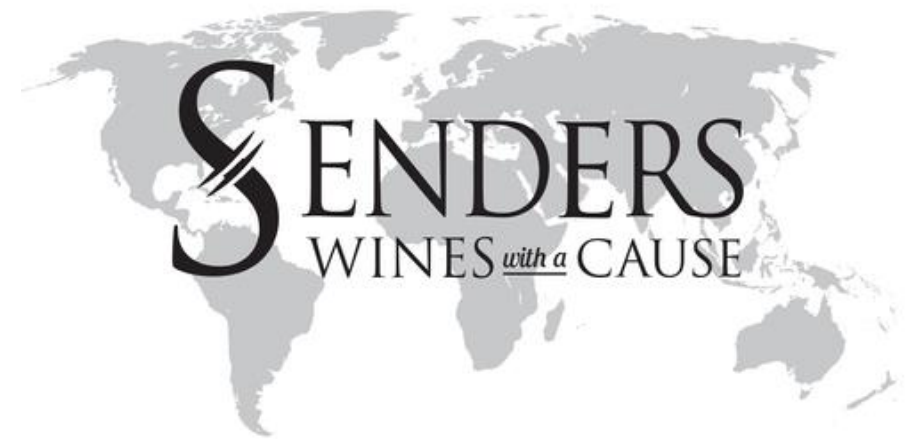
II. APPROACHES TO WINE TASTING

ORGANIZING YOUR SENSORY EXPERIENCE



BEFORE DURING AFTER (BDA[©])

- **B**efore Tasting
 - Sound (cork pop, effervescence)
 - Sight (color, legs, cork, bottle condition)
 - Aroma
- **D**uring (Wine in mouth)
 - Taste
 - Touch
 - Retronasal
- **A**fter (After you swallow)
 - Duration
 - Lingering taste



WSET SYSTEMATIC APPROACH TO TASTING (SAT)[™]

- Appearance
- Nose
- Palate
- Quality



WSET
WINE & SPIRIT
EDUCATION TRUST

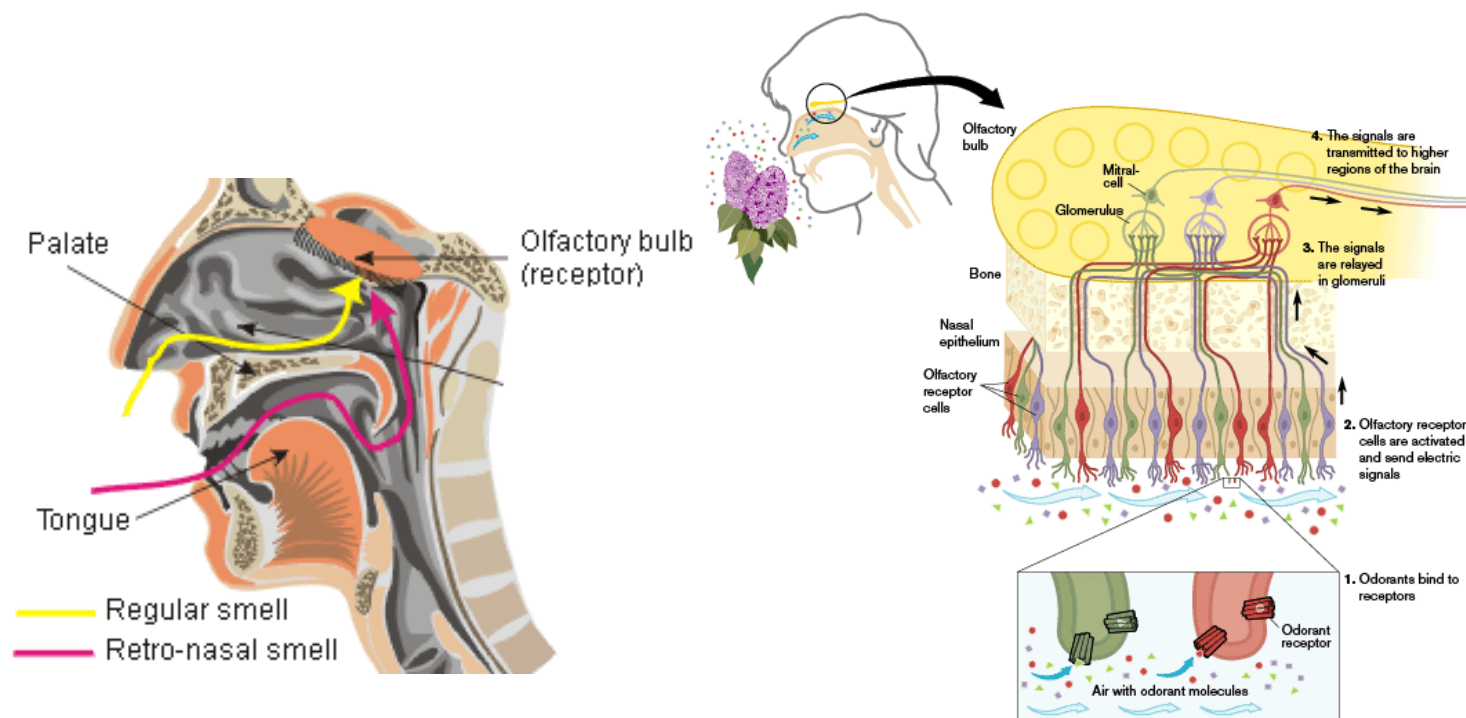
III. WINE TASTING

A COMPLETE SENSORY EXPERIENCE




“TASTING” WINE

- Sight
- Sound
- Smell
- Taste
- Touch
 - Texture
 - Temperature
 - Alcohol
 - Tannin
- Retro-nasal



2,000 to 10,000 scents

The background features several overlapping, flowing, ribbon-like shapes in shades of red, orange, and yellow. These shapes are positioned at the top and bottom of the frame, creating a sense of movement and depth. The central area is a plain white background where the text is located.

BEFORE (TASTING)

TASTE STANDING UP

- New World
- Bright Fruit
- Less Acidic
- Less Tannins
- Higher Alcohol



A better match with light food and conversation

BOTTLE VARIATION



- The wine
- The cork
- The glass
- The food
- Time of Day
- The company
- Your mood

There are no great wines, only great bottles of wine

TASTE SITTING DOWN

- Old World
- Higher acid
- Less fruit forward
- Higher acid
- Complex with lingering finish



A better match food

EFFECTS OF THE GLASS

- Shape



- Glass vs Crystal

APPEARANCE (WSET)

INTENSITY

- Pale
- Medium
- Deep
- White vs Red

COLOR



STRAW



YELLOW



GOLD



AMBER



RUBY



PURPLE



GARNET



TAWNY

NOSE (WSET)

INTENSITY

- Light
- Medium
- Pronounced

AROMA

1°: develop from fruit & alcoholic fermentation

2°: develop during wine making (after fermentation)

3°: develop during aging

PRIMARY (grapes & alcoholic fermentation)

Green Fruit	Citrus Fruit	Stone Fruit	Tropical Fruit	Red Fruit	Black Fruit	Cooked/Dried Fruit	Floral	Herbal	Other
Apple, pear, quince, gooseberry	Lemon, lime, grapefruit, orange	Peach, apricot, nectarine	Pineapple, lychee, mango, banana, melon, passion fruit	Cherry, strawberry, raspberry, currant, cranberry, plum	Blackberry, blueberry, currant, cherry, plum	Jam/preserves, fig, prune, raisin	Rose, violet, acacia, honeysuckle, chamomile, elderflower, geranium	Capsicum (green bell pepper), black or white pepper grass, tomato leaf, asparagus, lavender, fennel, dill	Licorice, flint, wet stone, wet wool

SECONDARY (wine making/post-alcoholic fermentation)

Oak Contact	Malolactic Conversion	Lees (dead yeast) Contact
Vanilla, cloves, nutmeg, coconut, butterscotch, toast, cedar, chocolate, coffee, smoke	Butter, cheese, cream	Biscuit, bread dough, toast, brioche, pastry, cheese

TERTIARY (aging)

White		Red		Either
Fruit development	Bottle Ageing	Fruit Development	Bottle Ageing	Deliberate Oxidation
Dried apricot, marmalade, dried apple, dried banana	Petrol, kerosene, cinnamon, ginger, nutmeg, toast, nut, mushroom, hay honey	Fig, prune, dried blackberry, dried cranberry, cooked blackberry, cooked red plum	Leather, forest floor, earth, mushroom, meat, game, tobacco, wet leaves, farmyard	Almond, marzipan, hazelnut, walnut, chocolate, coffee, toffee, caramel

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DURING (WINE IN MOUTH)

PALATE (WSET)

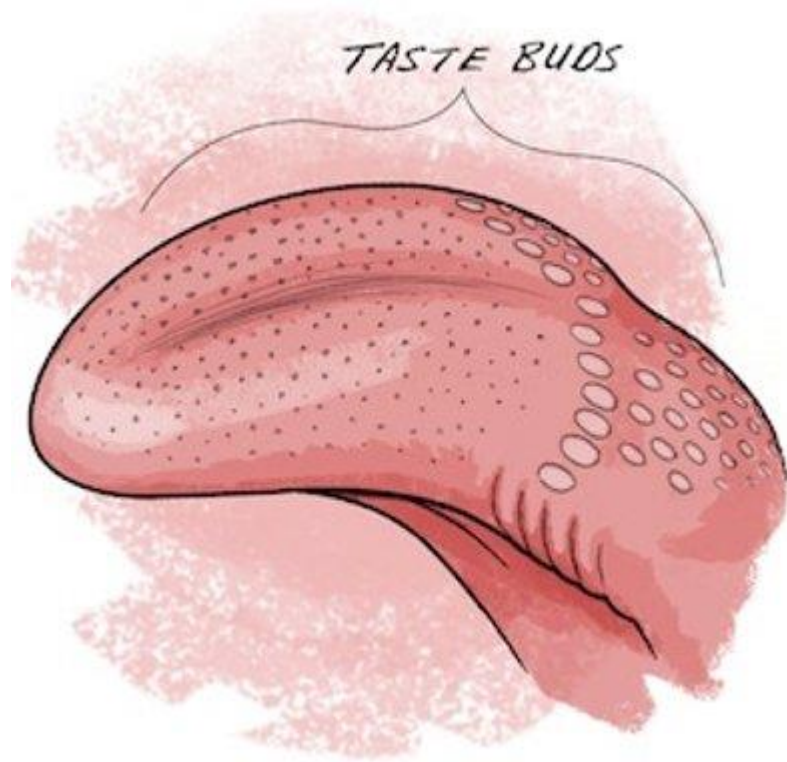
STRUCTURE

- Body (light, medium, full)
- Sweetness (dry, off dry, medium, sweet)
- Acidity (low, medium, high)
- Tannin (low, medium, high)
- Alcohol
 - Low (<11% ABV)
 - Medium (11-14% ABV)
 - High (> 14% ABV)

FLAVOR

- Intensity
- Characteristics

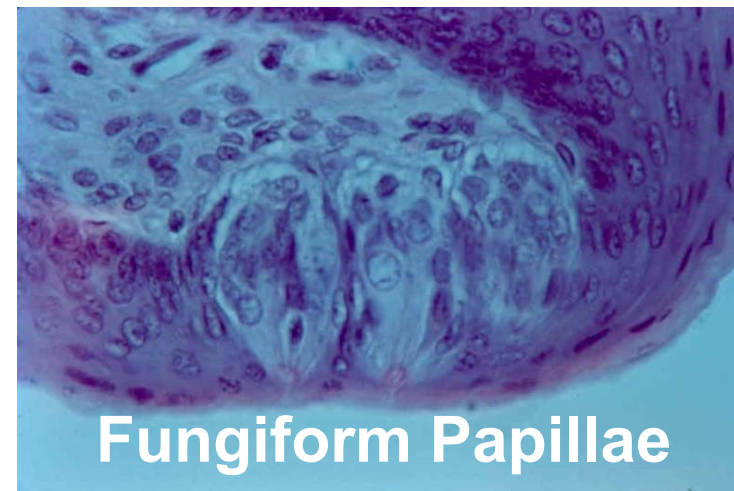
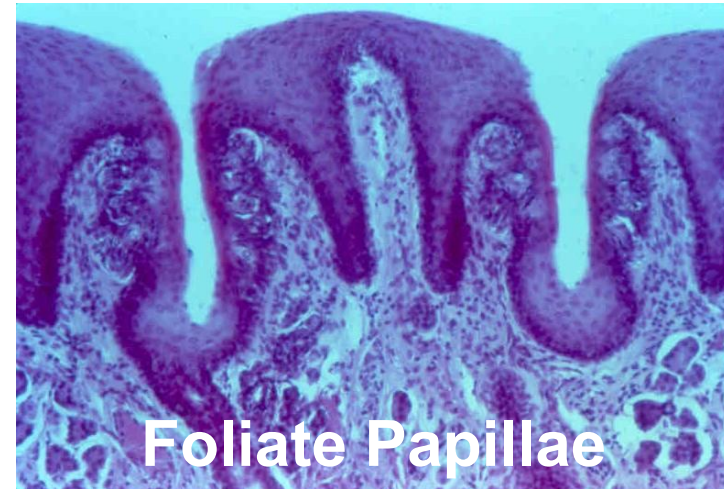
INNERVATION OF FLAVOR



- Chorda Tympany
- Trigeminal
- Glossolpharyngeal

FLAVOR

- Primary (Chorda Tympany)
 - Taste buds with saliva
- Touch (Trigeminal/Glosalpharyngeal)
 - Texture
 - Temperature
 - Alcohol
 - Tannin
 - Capsaicin
- Retro-nasal olfaction





ACTIVITY # 1



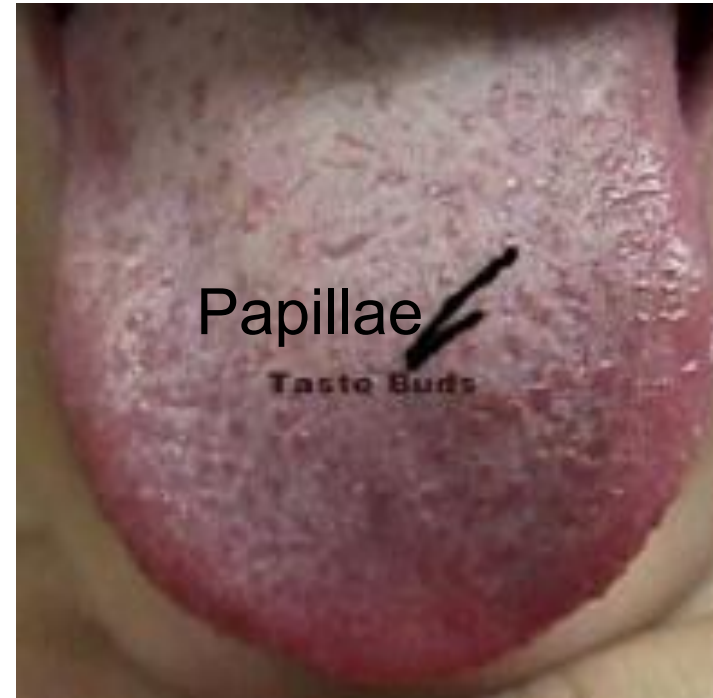


ACTIVITY #2



TASTE

- Sweet
 - 2 types
- Sour
- Bitter
 - Up to 20 types
- Salt
- Umami (“Yummy”)
 - Mono Sodium Glutamate (MSG)
 - Protein rich foods, cheese, meat, mushrooms



TASTE

- High Sensitivity 25%
 - 35% women, 15% men
 - Hyper-tasters
- Normal Sensitivity 50%
- Low Sensitivity 25%



SUPERTASTERS

LINDA BARTOSHUK YALE UNIVERSITY

- Increased taste sensitivity
 - Especially bitter (6-propyluracil, quinine, coffee, tannin)
 - Tartness (Acid)
- Higher perception of oral pain
 - Increased sensation to capsaicin and ethanol



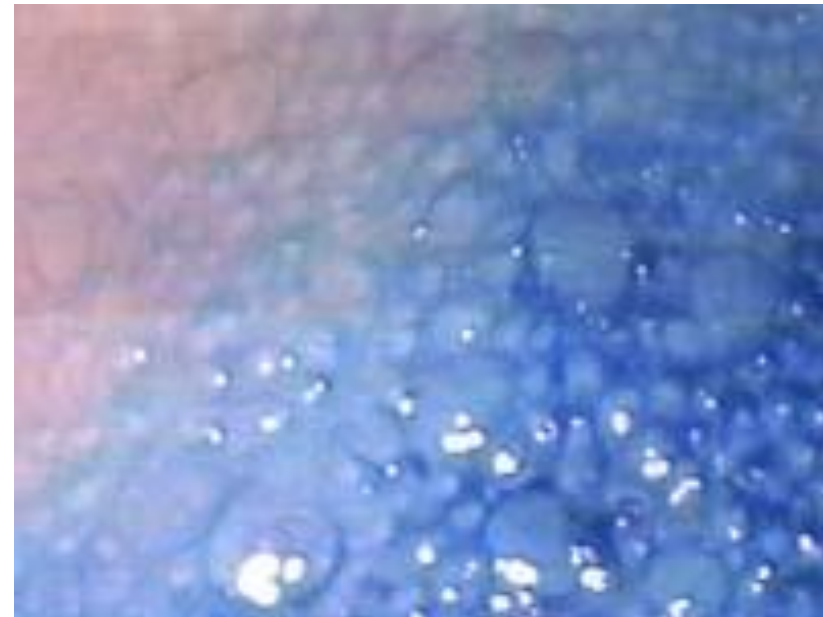
Habenero, 100-500K Scoville units

SUPERTASTERS

TASTE BUDS (PAPILLAE) PER ¼ INCH

Tall and fast is good athlete

- Supertasters
 - >35 papillae (taste buds)
 - Taste 6 propyluracil (PROP)
- Normal
 - 10-35 papillae (taste buds)
- Hypo-taster (Tolerant)
 - <10 papillae (taste buds)



Linda Bartoshuk Phd Yale Dept Oto & Psych 1993

SUPERTASTER'S CURSE

- Increased taste sensitivity (*Sensory Unpleasantness*)
- Avoid bitter foods (flavonoids in vegetables)
 - Coffee, bitter vegetables, walnuts, dark chocolate, quinine, hoppy beer (ales/pilsners), *tannins*
- Oral Pain
 - Capsaicin
 - *ETOH*
- ? Higher CA
 - Decrease vegetables, lower fiber
 - Increased colon polyps
- Satiated earlier with fat and sugars
- Thinner, lower cholesterol (lower CV disease)

LET'S TASTE OUR WINES!



TODAY'S WINES

	#1	#2	#3	#4
Varietal:	Sauvignon Blanc	Chardonnay	Pinot Noir	Cabernet Sauvignon
Maker:	St Supery	Beringer	Walt	Senders
Year:	2023	2023	2023	2016
Region:	Napa Valley	Napa Valley	Sonoma Valley	Napa Valley