The Art of Dynamic Research Presentations

Line Hilton MSc PAM, B. Mus Ed (Jazz), Cl. Hyp

PAMA Performing Arts Medicine Association

Content overview

- Why is this important?
- How to design a dynamic presentation
- Considerations
- Presenting with confidence
- Time keeping and managing questions
- Presentation preparation

Why is it important?

- Disseminating knowledge
- Validation and feedback
- Inspire and impact

And…

- Collaborations
- Professional development
- Career advancement

How to design a dynamic presentation

Somebody … wanted … but … then …epiphany … result…

What to include

and not include

- Start with understanding less is more!
- Focus on **key** findings and their **relation** to your question
- **Highlight** relevant data and its significance
- Avoid unnecessary data, jargon or acronyms

Planning your content

- Title page - your name, affiliation, date
- Brief intro
- Hypothesis
- Provide context
- Brief description of methodology
- Findings with key data. Use bar or scatter graphs
- Conclusion/interpretation
- Future recommendations

Planning your content

- Q&A slide with your contact details.

  (acknowledgements can be placed here too)
- Reference list

Design considerations

- Layout
- Colours
- Fonts and sizes
- Text density
- Graphics and images
- Transitions, animations and video

Design considerations

- Use easy to read colours with contrast and be aware greens and reds may be problematic for some
- Use legible fonts (sand serif) and font sizes 18-36 point
- 1.3-1.5 line spacing
- DON'T CAPITALISE
- Avoid drop shadows
- Space
- Images etc
- Bullet points

TABLE 1. Properties of protein prenyltransferases

Protein Prenyltransferase	Protein Substrate C-Terminus	Isoprenoid Substrate	Metal Requirements	Subunit Composition (Mammalian)	*S. cerevisiae* Gene Product	Reference
PFT	-CAAX X = M,S,Q,A	FPP	Zn^{2+}, Mg^{2+}	48 kDa(α) 46kDa(β)	RAM2(α) RAM1(β)	28-32
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PGGT(CC)	-CC (rab proteins)	GGPP	?	?	BET2? Others?	51, 56
PGGT(CXC) [same as PGGT (CC)?]	-CXC	GGPP	?	?	BET2? Others?	55

The PGGT enzymes are separated into three classes, one of which acts on CAAX-containing proteins [PGGT(CAAX)] and two that act on the rab/YPT1 protein family members [PGGT(CC) and PGGT(CXC)], although there may be only one enzyme that can recognize the latter two classes of substrate proteins. Single letter amino acid abbreviations are: C, cysteine; M, methionine; S, serine; Q, glutamine; A, alanine; L, leucine.

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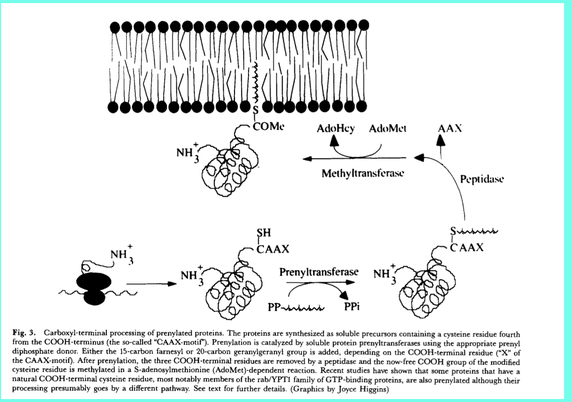

Fig. 3. Carboxyl-terminal processing of prenylated proteins. The proteins are synthesized as soluble precursors containing a cysteine residue fourth from the COOH-terminus (the so-called "CAAX-motif"). Prenylation is catalyzed by soluble protein prenyltransferases using the appropriate prenyl diphosphate donor. Either the 15-carbon farnesyl or 20-carbon geranylgeranyl group is added, depending on the COOH-terminal residue ('X' of the CAAX-motif). After prenylation, the three COOH-terminal residues are removed by a peptidase and the now-free COOH group of the modified cysteine residue is methylated in a S-adenosylmethionine (AdoMet)-dependent reaction. Recent studies have shown that some proteins that have a natural COOH-terminal cysteine residue, most notably members of the rab/YPT1 family of GTP-binding proteins, are also prenylated although their processing presumably goes by a different pathway. See text for further details. (Graphics by Joyce Higgins)

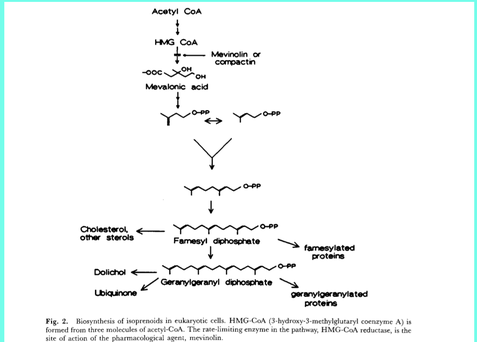

Fig. 2. Biosynthesis of isoprenoids in eukaryotic cells. HMG-CoA (3-hydroxy-3-methylglutaryl coenzyme A) is formed from three molecules of acetyl-CoA. The rate-limiting enzyme in the pathway, HMG-CoA reductase, is the site of action of the pharmacological agent, mevinolin.

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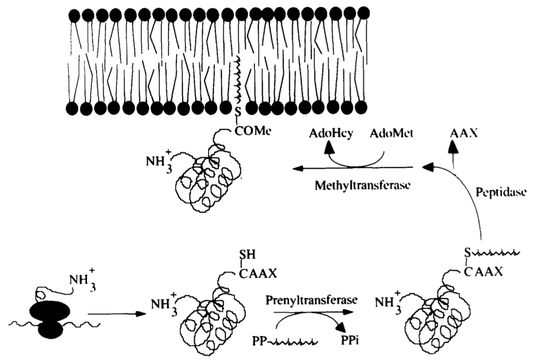

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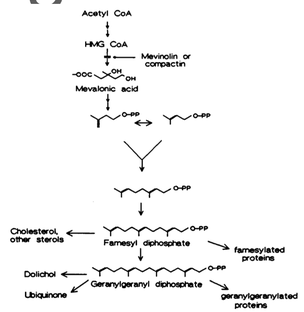

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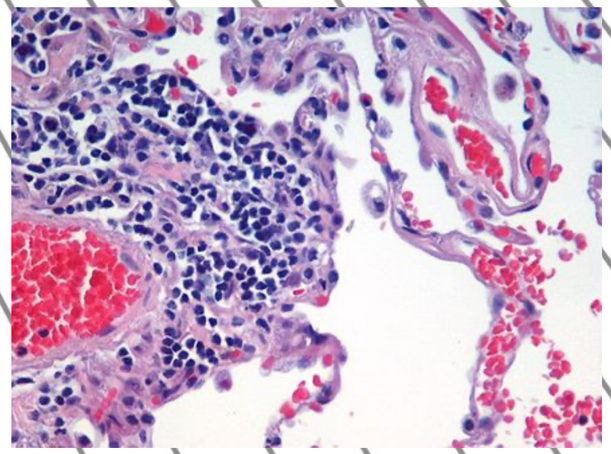
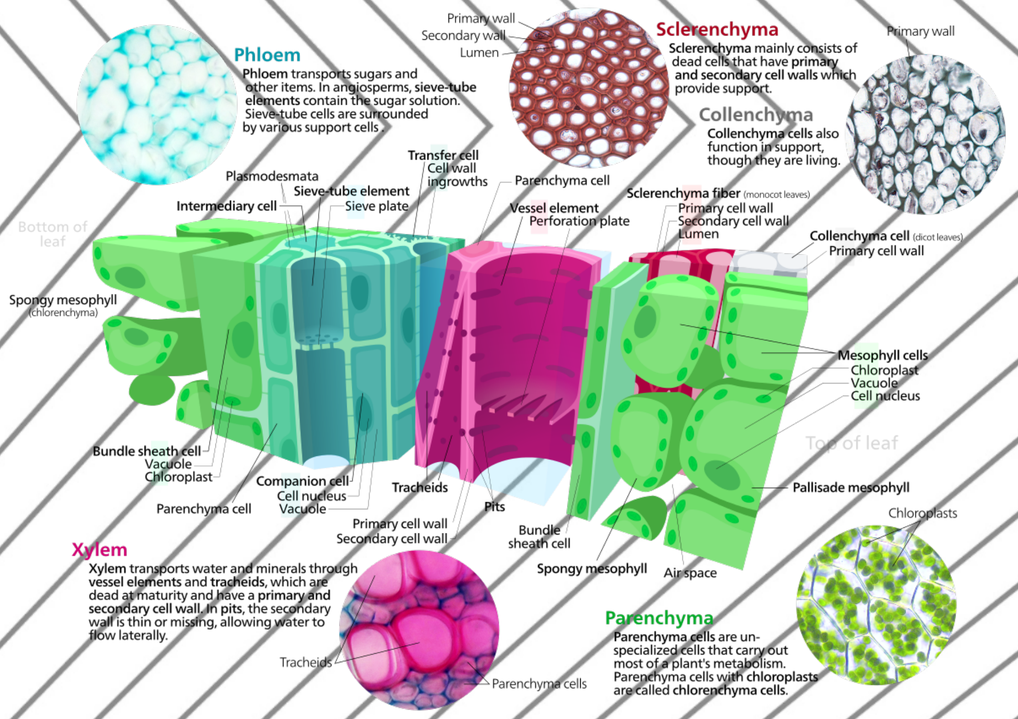
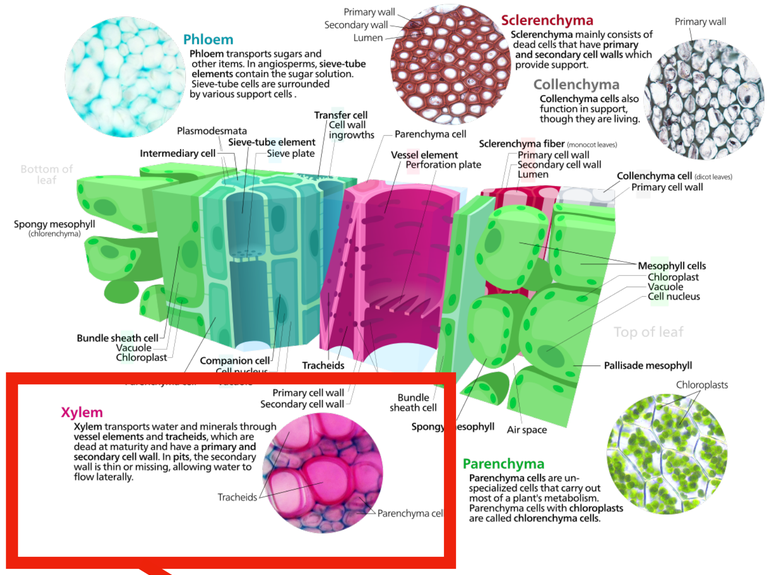


- Keep text as brief possible. Complete sentences not required
- Graphics need to be legible and relevant

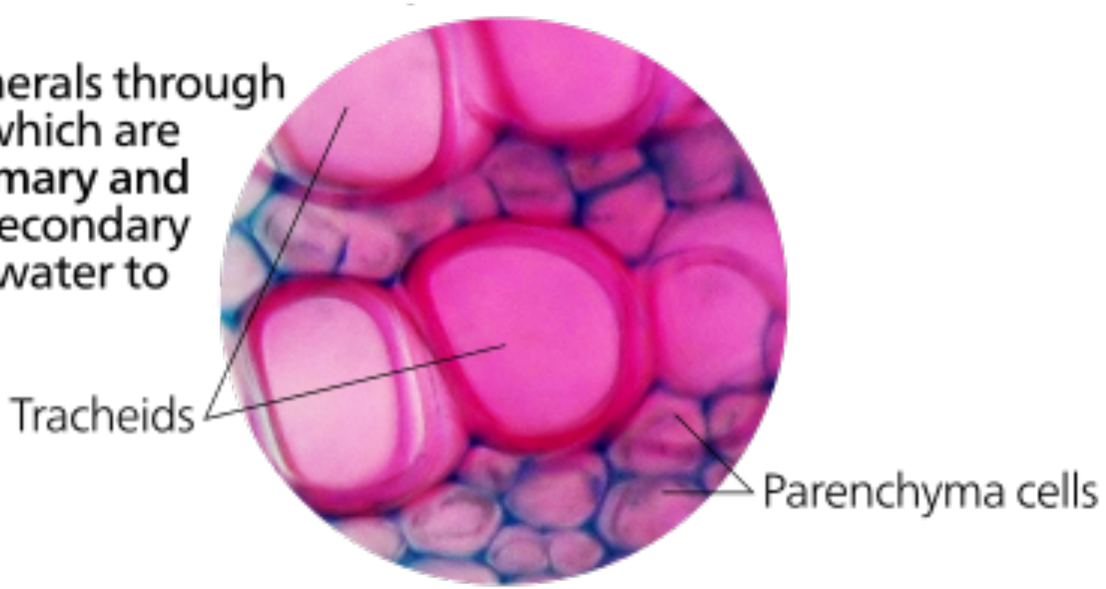
Prenylation is not the only posttranslational modification performed on proteins containing the CAAX-motif. Specifically, the mature forms of these prenylated proteins lack the three COOH-terminal amino acids (the “AAX). A cellular peptidase (see Section VI) removes these three amino acids, leaving the prenylated cysteine as the COOH-terminal residue. Additionally, in all cases where the prenylated proteins have been closely examined, asubstantial fraction have the carboxyl group of this cysteine residue methylated (2, 22). The net result of these three apparently closely linked processing steps is the production of a mature protein with a highly hydrophobic COOH-terminus, a dramatic enhancement of the inherent hydrophobic properties of these proteins (Fig. 3).





Xylem

Xylem transports water and minerals through **vessel elements** and **tracheids**, which are dead at maturity and have a **primary and secondary cell wall**. In **pits**, the secondary wall is thin or missing, allowing water to flow laterally.



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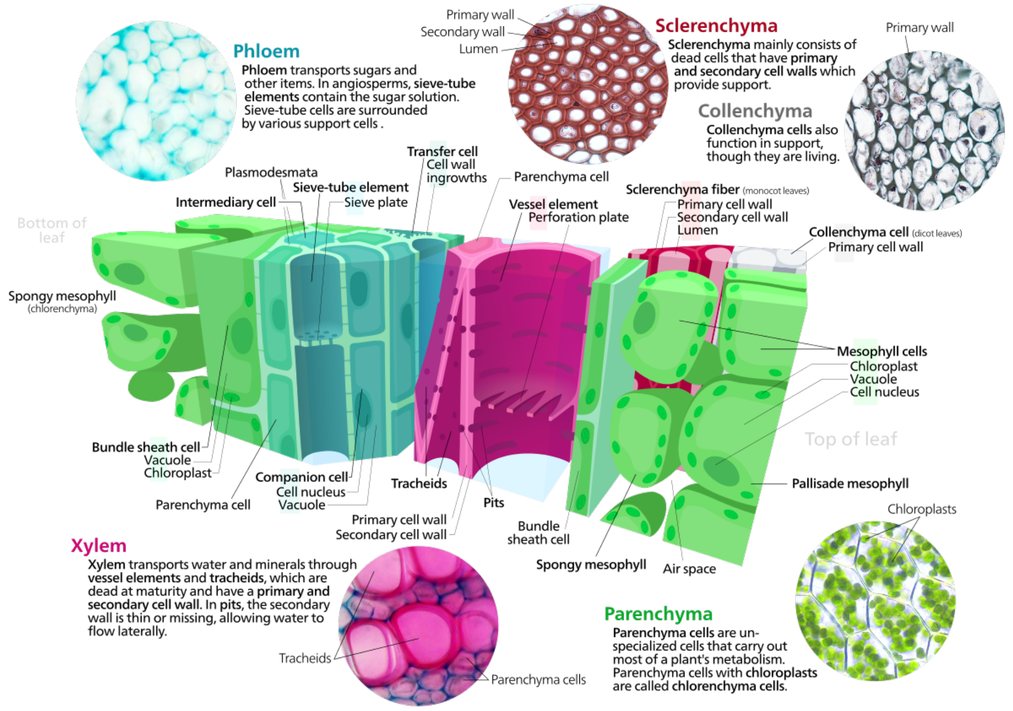

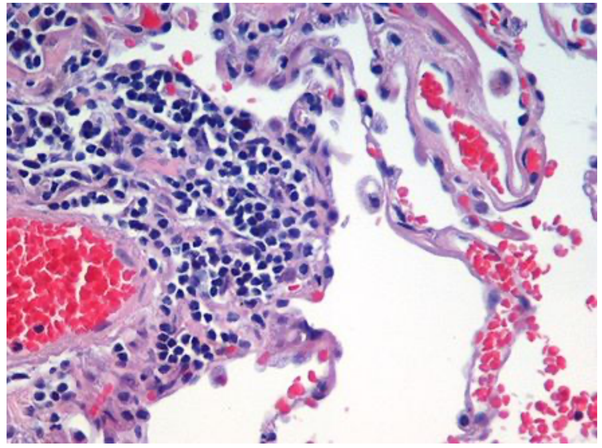

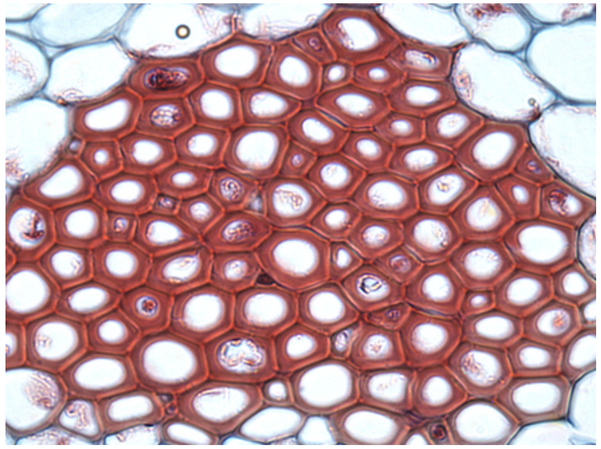

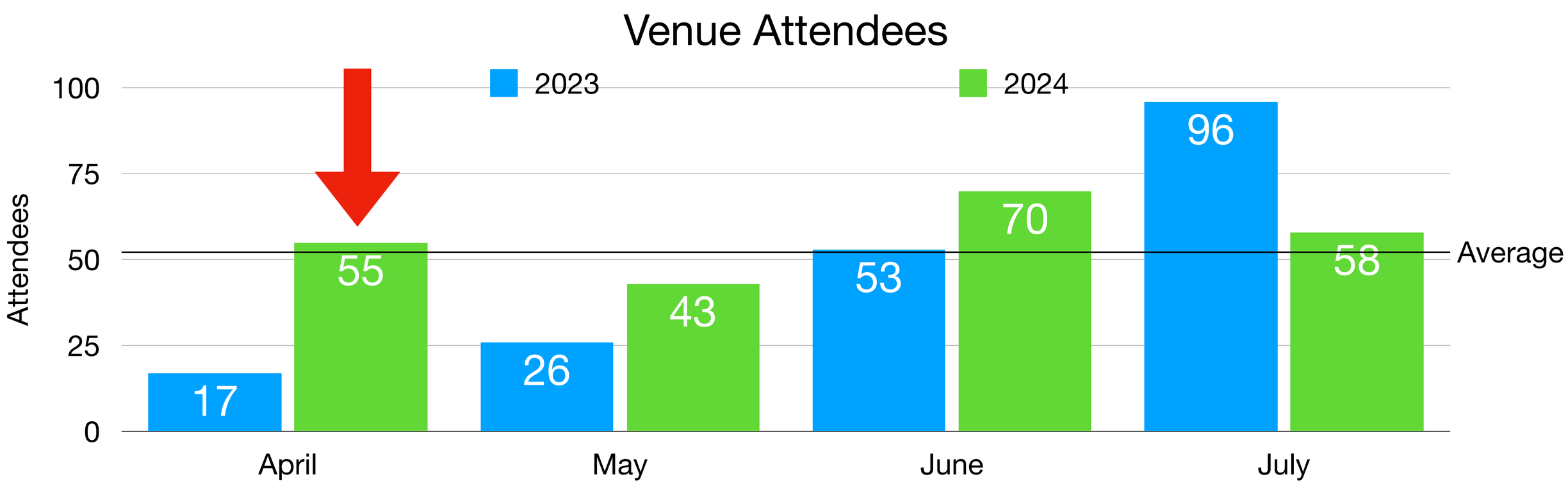
Venue Attendees
2023
2024
Attendees
100
75
50
25
0
Average
17
55
26
43
53
70
96
58
April
May
June
July

Table 1: Number of visits to the UK by overseas residents

This worksheet contains one table. Freeze panes is turned on.

To turn off freeze panes select the 'View' ribbon then 'Freeze Panes' then 'Unfreeze Panes' or use [Alt W, F]

Period	North America	Europe	EU	EU15	Other EU	Other Countries	World Total	Percentage Change [Note 1]	Seasonally adjusted World Total
2019	5,373,000	27,293,000	24,828,000	20,328,000	4,500,000	8,191,000	40,857,000	1.4%	Not available
2020	1,171,000	7,988,000	Not available	Not available	Not available	1,942,000	11,101,000	-72.8%	Not available
2021	792,000	4,834,000	4,410,000	3,516,000	895,000	759,000	6,384,000	-42.5%	Not available
2022	5,483,000	20,980,000	18,959,000	15,621,000	3,338,000	4,781,000	31,244,000	389.4%	Not available
2019 Q1	900,000	6,044,000	5,543,000	4,456,000	1,086,000	1,388,000	8,332,000	-2.5%	9,923,000
2019 Q2	1,537,000	6,879,000	6,272,000	5,187,000	1,085,000	1,948,000	10,364,000	-1.5%	9,812,000
2019 Q3	1,745,000	7,156,000	6,512,000	5,389,000	1,123,000	2,963,000	11,864,000	2.8%	10,304,000
2019 Q4	1,191,000	7,215,000	6,502,000	5,295,000	1,206,000	1,891,000	10,297,000	6.4%	10,779,000
2020 Q1	794,000	4,926,000	4,472,000	3,603,000	869,000	1,274,000	6,994,000	-16.1%	8,514,000
2020 Q2	40,000	298,000	Not available	Not available	Not available	60,000	398,000	-96.2%	Not available
2020 Q3	207,000	1,754,000	Not available	Not available	Not available	361,000	2,322,000	-80.4%	Not available
2020 Q4	130,000	1,009,000	Not available	Not available	Not available	247,000	1,386,000	-86.5%	Not available
2021 Q1	31,000	158,000	147,000	111,000	36,000	56,000	245,000	-96.5%	Not available
2021 Q2	51,000	242,000	216,000	173,000	42,000	53,000	346,000	-13.1%	Not available
2021 Q3	289,000	1,528,000	1,395,000	1,078,000	317,000	222,000	2,040,000	-12.2%	Not available
2021 Q4	421,000	2,904,000	2,653,000	2,154,000	499,000	428,000	3,753,000	170.8%	Not available
2022 Q1	415,000	2,821,000	2,570,000	2,063,000	506,000	508,000	3,743,000	1427.9%	Not available
2022 Q2	1,587,000	5,189,000	4,699,000	3,954,000	746,000	1,181,000	7,957,000	2199.8%	Not available
2022 Q3	2,157,000	6,085,000	5,473,000	4,542,000	931,000	1,705,000	9,946,000	387.6%	Not available
2022 Q4	1,324,000	6,886,000	6,218,000	5,062,000	1,156,000	1,388,000	9,598,000	155.7%	Not available
2023 Q1 P	997,000	5,468,000	4,968,000	3,957,000	1,011,000	1,228,000	7,692,000	105.5%	Not available
2023 Q2 P	1,952,000	6,237,000	5,653,000	4,679,000	974,000	1,694,000	9,882,000	24.2%	Not available

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pitch deck

PREPARED BY WARNER &

THESIS DEFENSE

Presented By : Adeline Palmerston

Larana University | 2024

BUSINESS PRESENTATION

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore

reallygreatsite.com

Liceria & Co.

PROJECT PROPOSAL

PRESENTATION TEMPLATE

Start Slide

Presenting with confidence

- Practice!
- Video record self
- Get feedback - self and others
- Give yourself plenty of prep time
- Try out in less high stake situation

Presenting with confidence

- Run a dress rehearsal
- Microphone, laser pointer and remote
- Check out the stage, podium before hand
- Practice managing in a worse case scenario

Keeping to time

You get 12 minutes for the presentation and 3 minutes for Q&A.

- Prepare everything
- **Practice** timing beforehand
- Use visual cues (e.g., rehearsal timer on slides or mobile)
- **Rehearse** transitions between sections
- The average is120 words per min
- **Practice…and practice again**

Managing Q&A

- Rehearse!
- Repeat each question
- Provide clear and concise answers
- Avoid long one-on-one discussions
- Finish by asking if you answered it sufficiently for them
- If you can’t answer questions that’s OK
- Suggest resources which would help address question

Voice preparation

- Straw phonation (Search straw +Titze on YouTube)
- Warm up the articulators e.g. tongue twisters
- Hums, sirens, Lip Bubbles
- Huh-Ah, Huh-Mm
- Keep hydrated
- Avoid reflux any thing you’re allergic to and the dreaded lurgy 🦠

Mindset Preparation

- Breathe
- Reframe
- Explore Emotional Freedom Technique (Tapping) or NLP anchoring strategies
- Visualisation
- Mindfulness and meditation
- Mind your diet - intolerances or allergies, sugar, caffeine, alcohol

Outfit

- Professional but comfortable
- Layers
- Practice in outfit
- Avoid noisy jewellery

Other matters

- No need to include disclosures, this will be in the onsite handout
- Back ups

Finally…

You’ve got this

info@linehilton.com | linehilton.com | @linehilton

References

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Titze, I. (2010) *Vocal straw exercise*, *Vocal Straw Exercise*. Available at: https://youtu.be/0xYDvwvmBIM?si=tMh1rfwlMB4NDUoG (Accessed: 15 April 2024).