Stacy McClure, MD

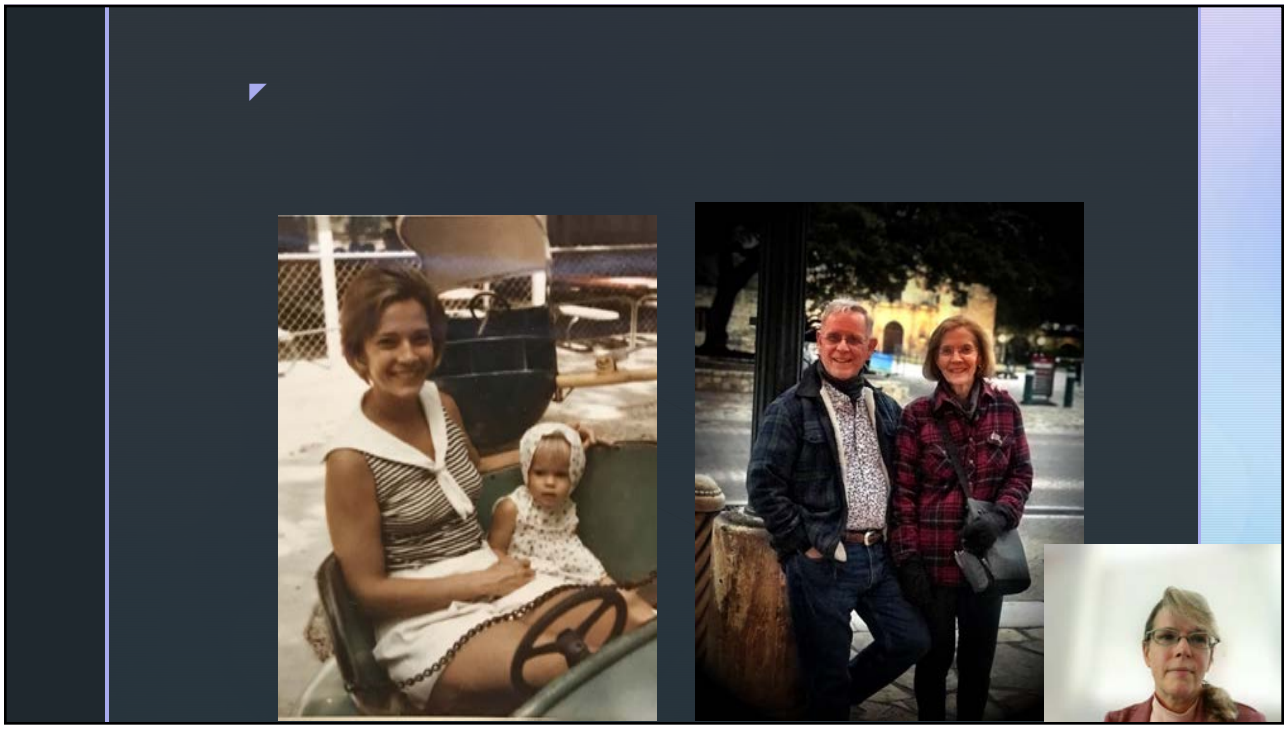
Tolerance through epigenetics? My story

1

Thank you

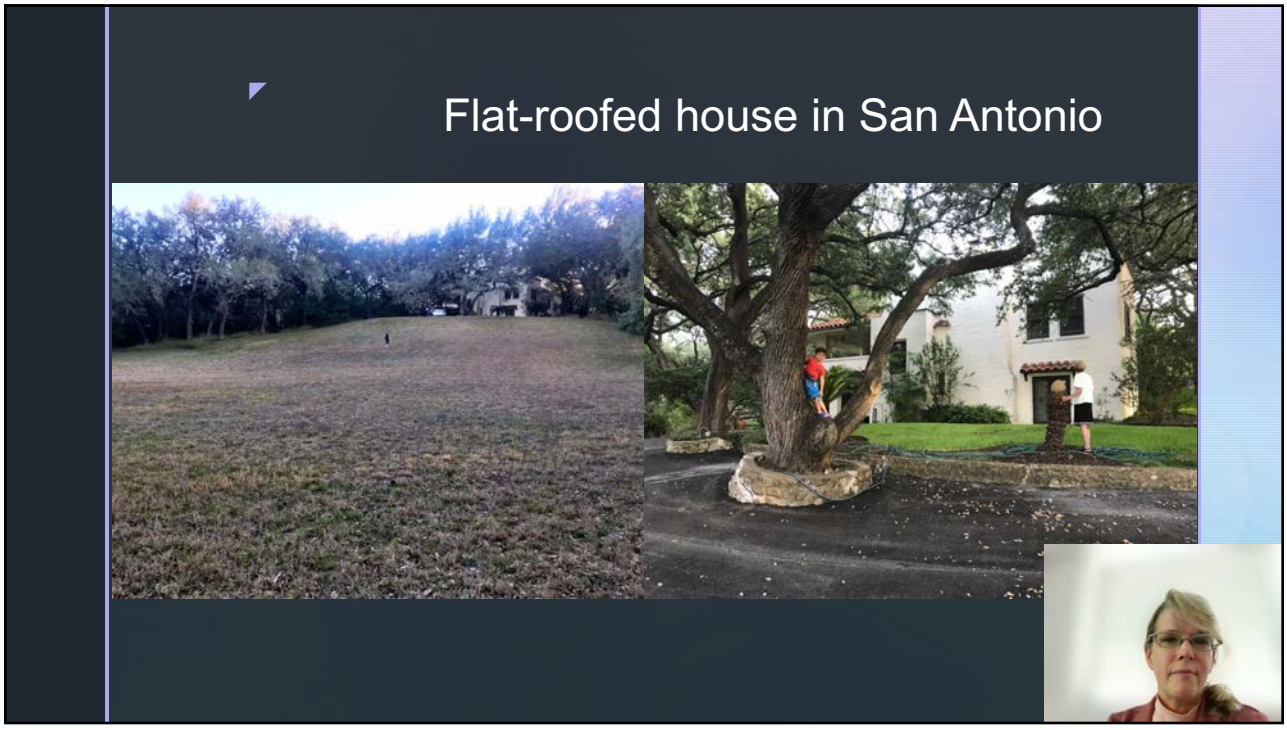
- Ritchie Shoemaker and Deborah Waidner
- Dr. Bill Anderson
- Larry Swartz and Michelle Fisher at Safestart Environmental

2



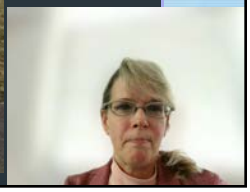
3

Flat-roofed house in San Antonio



4

San Antonio cottage



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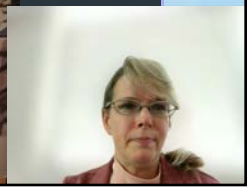
Lincoln Park Apartment

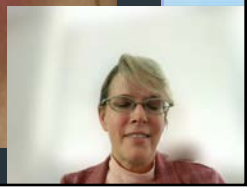


6

Lincoln Park laundry room

7

Flushing episodes

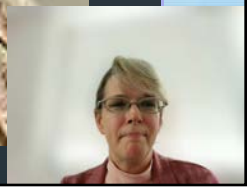


8

Condo in Lakeview Chicago

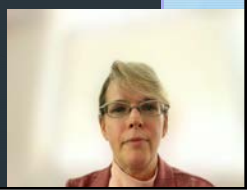
9

Weight gain



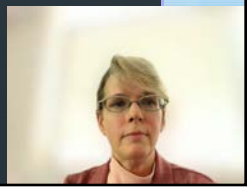
10

My daughter



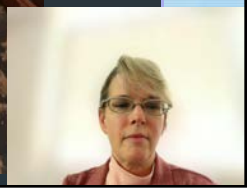
11

Our first house



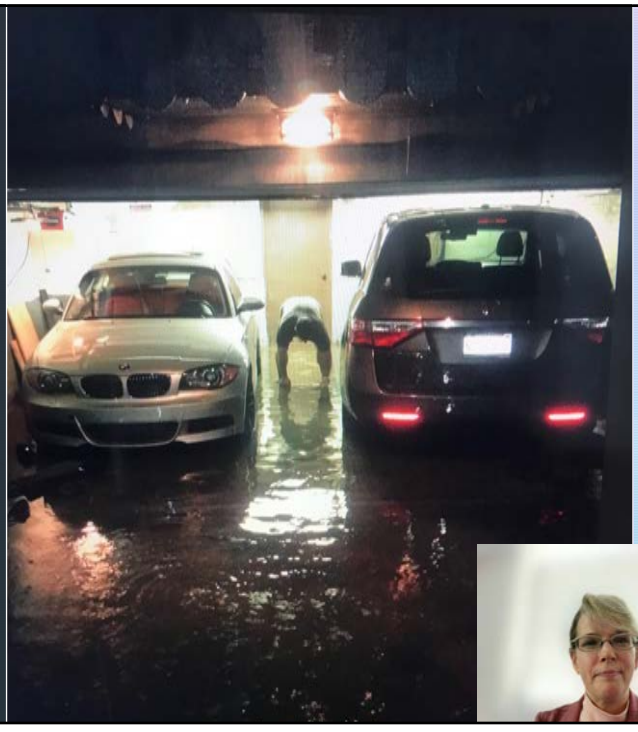
12

Basement in our new house



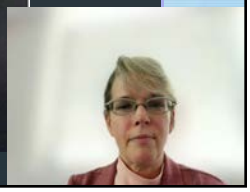
13

Our attached garage



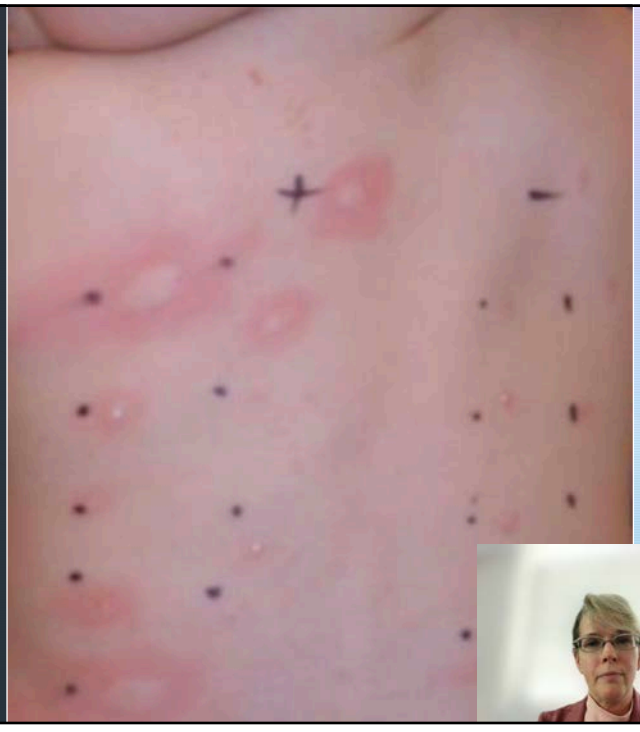
14

My daughter's mosquitoe bite



15

Prick test



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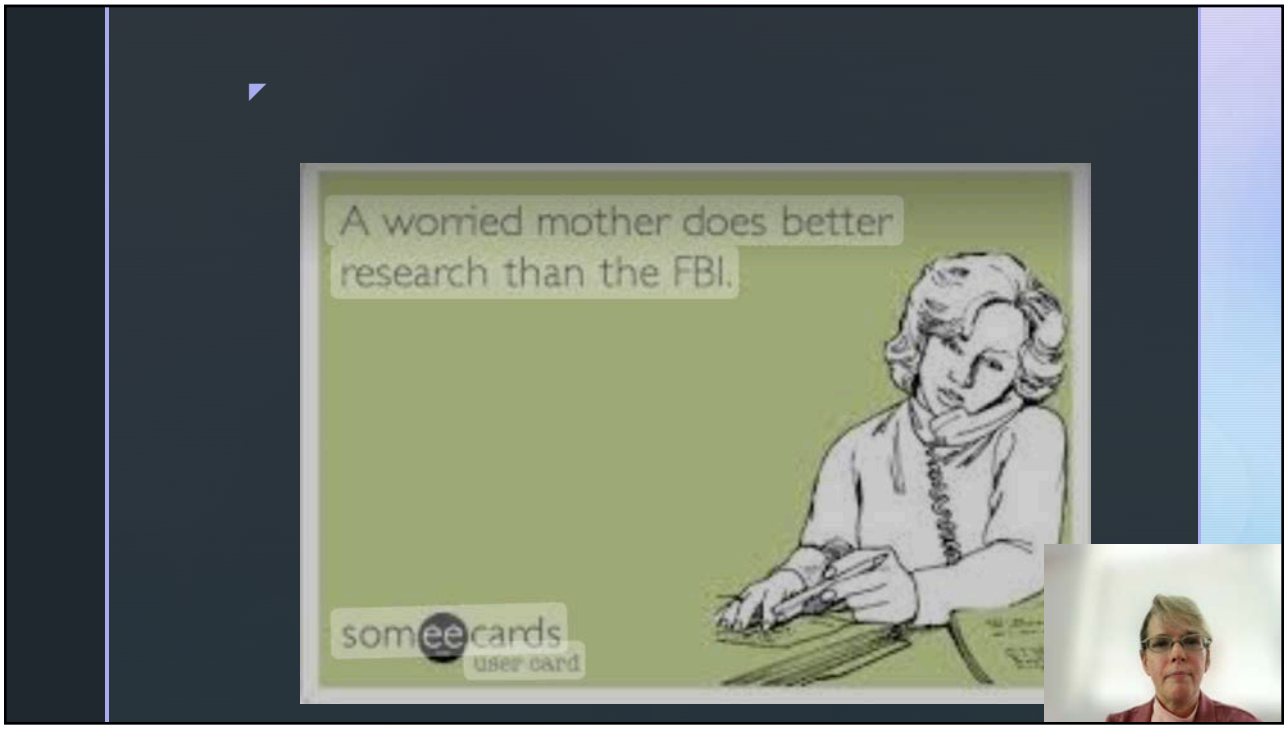

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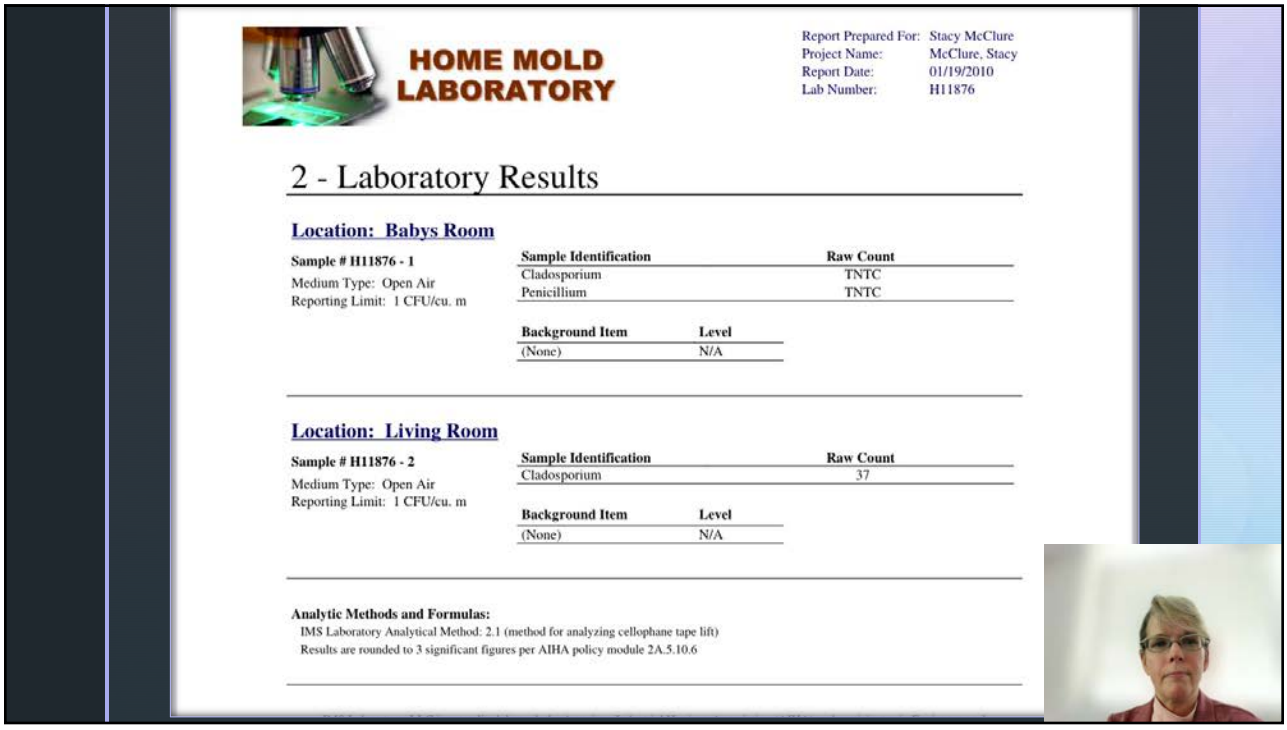


HOME MOLD LABORATORY

Report Prepared For: Stacy McClure
Project Name: McClure, Stacy
Report Date: 01/19/2010
Lab Number: H11876

2 - Laboratory Results

Location: Babys Room

Sample # H11876 - 1
Medium Type: Open Air
Reporting Limit: 1 CFU/cu. m

Sample Identification	Raw Count
Cladosporium	TNTC
Penicillium	TNTC

Background Item	Level
(None)	N/A

Location: Living Room

Sample # H11876 - 2
Medium Type: Open Air
Reporting Limit: 1 CFU/cu. m

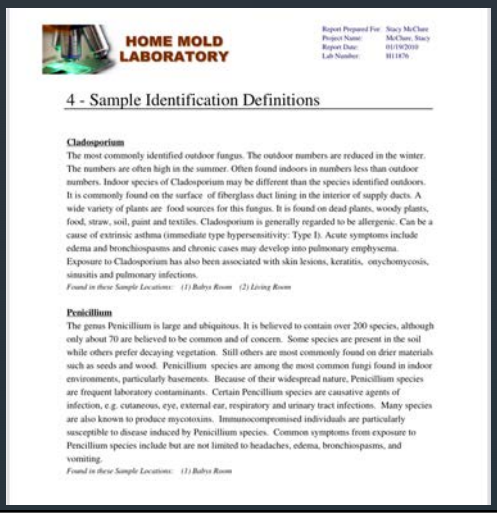
Sample Identification	Raw Count
Cladosporium	37

Background Item	Level
(None)	N/A

Analytic Methods and Formulas:
IMS Laboratory Analytical Method: 2.1 (method for analyzing cellophane tape lift)
Results are rounded to 3 significant figures per AIHA policy module 2A.5.10.6

18

Home Mold Report from 2010



HOME MOLD LABORATORY

Report Prepared For: Stacy McClure
Project Name: McClure, Stacy
Report Date: 01/19/2010
Lab Number: H11876

4 - Sample Identification Definitions

Cladosporium
The most commonly identified outdoor fungus. The outdoor numbers are reduced in the winter. The numbers are often high in the summer. Often found indoors in numbers less than outdoor numbers. Indoor species of Cladosporium may be different than the species identified outdoors. It is commonly found on the surface of fiberglass duct lining in the interior of supply ducts. A wide variety of plants are food sources for this fungus. It is found on dead plants, woody plants, food, straw, soil, paint and textiles. Cladosporium is generally regarded to be allergenic. Can be a cause of extrinsic asthma (immediate type hypersensitivity: Type I). Acute symptoms include edema and bronchiospasms and chronic cases may develop into pulmonary emphysema. Exposure to Cladosporium has also been associated with skin lesions, keratitis, onychomycosis, sinusitis and pulmonary infections.
Found in these Sample Locations: (1) Babys Room (2) Living Room

Penicillium
The genus Penicillium is large and ubiquitous. It is believed to contain over 200 species, although only about 70 are believed to be common and of concern. Some species are present in the soil while others prefer decaying vegetation. Still others are most commonly found on drier materials such as seeds and wood. Penicillium species are among the most common fungi found in indoor environments, particularly basements. Because of their widespread nature, Penicillium species are frequent laboratory contaminants. Certain Penicillium species are causative agents of infection, e.g. cutaneous, eye, external ear, respiratory and urinary tract infections. Many species are also known to produce mycotoxins. Immunocompromised individuals are particularly susceptible to disease induced by Penicillium species. Common symptoms from exposure to Pencillium species include but are not limited to headaches, edema, bronchiospasms, and vomiting.
Found in these Sample Locations: (1) Babys Room

HOME MOLD LABORATORY

Report Prepared For: Stacy McClure
Project Name: McClure, Stacy
Report Date: 01/19/2010
Lab Number: H11876

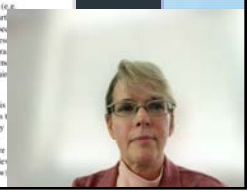
3 - Understanding Laboratory Results

Laboratory findings must only be considered as part of an overall mold investigation. The interpretation of the findings must only be made by a qualified individual after reviewing all relevant data. Visual information and environmental conditions measured during the site assessment are crucial to any final interpretation of the results. A very good reference book which covers sampling and data interpretation has been published by The American Conference of Governmental and Industrial Hygienists and is entitled *Bioaerosols: Assessment and Control*, 1999.

Numerical guidelines cannot be used as the primary determinant as to whether a mold problem may exist. Concentrations of mold in the air will vary depending on weather conditions, building air flow, time of day and time of year. Comparisons between indoor and outdoor mold levels, types of mold found, visual information and environmental conditions are more important in interpreting results than reliance on specific numeric thresholds.

In *Indoor Air Quality in Office Buildings: A Technical Guide, Health Canada*, Revised 1995 (Pages 49-50), Health Canada set forth guidelines which can be used to better understand air testing results. The guidelines included these general principles. Significant numbers of certain pathogenic fungi should not be present in indoor air (e.g. Aspergillus fumigatus, Histoplasma, and Cryptococcus). Bird or bat droppings in air intakes, ducts or rooms should be assumed to contain these pathogens. The persistent presence of significant numbers of toxigenic fungi (e.g. Stachybotrys atra, toxigenic Aspergillus, Penicillium and Fusarium species) indicate that furt investigation and action should be taken. The confirmed presence of one or more fungal spec occurring as a significant percentage of a sample in indoor air samples and not similarly pres in concurrent outdoor samples is evidence of a fungal amplifier. The "normal" air mycoflora qualitatively similar and quantitatively lower than that of outdoor air. The significant presen of fungi in humidifiers and diffuser ducts and on moldy ceiling tiles and other surfaces requir investigation and remedial action regardless of the airborne mold concentrations.

Generally, mold spores are present everywhere. As a general rule, "normal" air mycoflora is qualitatively similar and quantitatively lower than that of outdoor air. When the converse is t it is likely that an indoor source of mold may exist. However, even this most basic rule may produce misleading results. Airborne mold spore levels vary widely due to factors such as weather conditions and activity levels. For example, in a "normal" home, indoor mold spore levels may be elevated above outdoor spore levels after vacuuming (when airborne indoor le could be unusually high) or after a heavy snow (when outdoor levels could be unusually low



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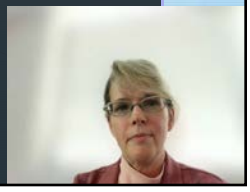
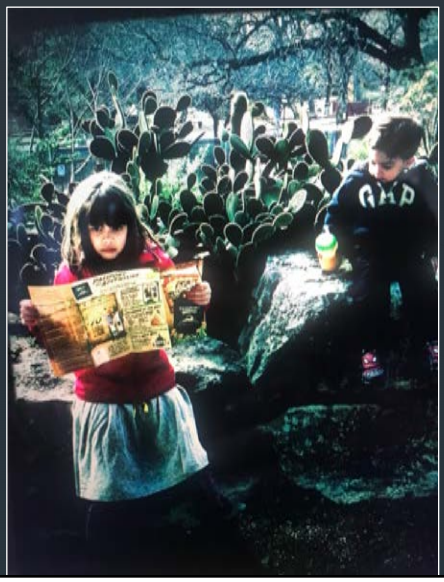
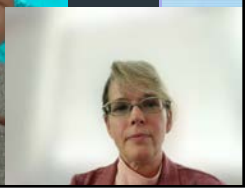


20

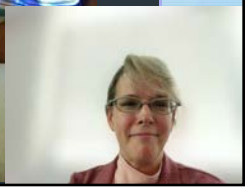
My daughter -ADD diagnosis





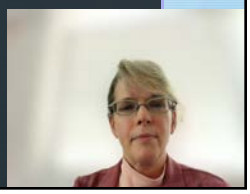
21

My son



22

post pregnancy



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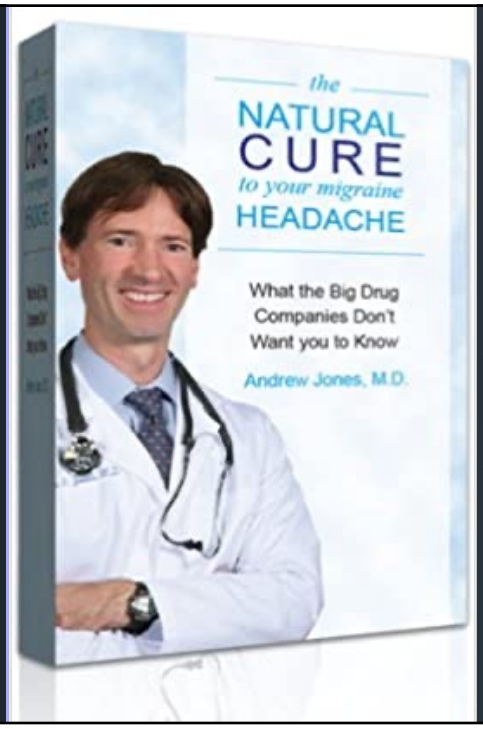
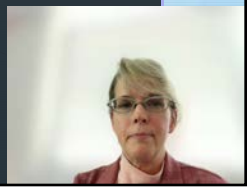


Book on migraines



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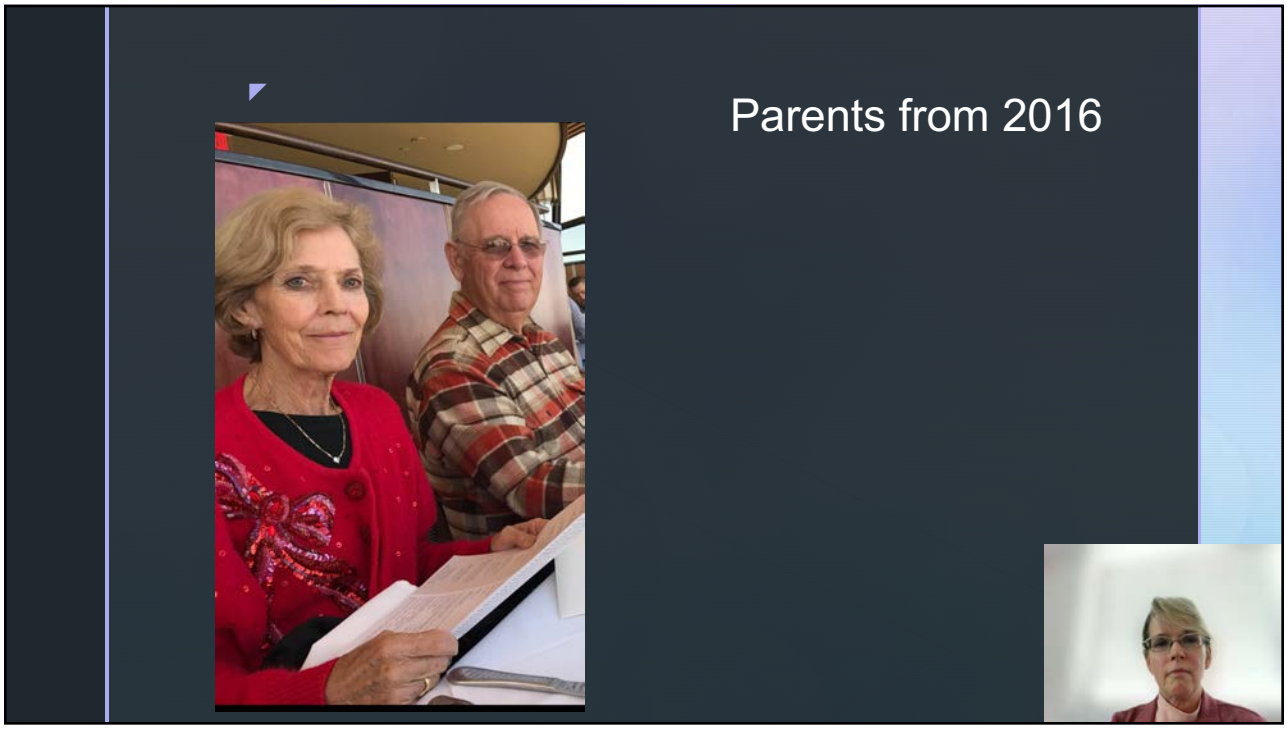

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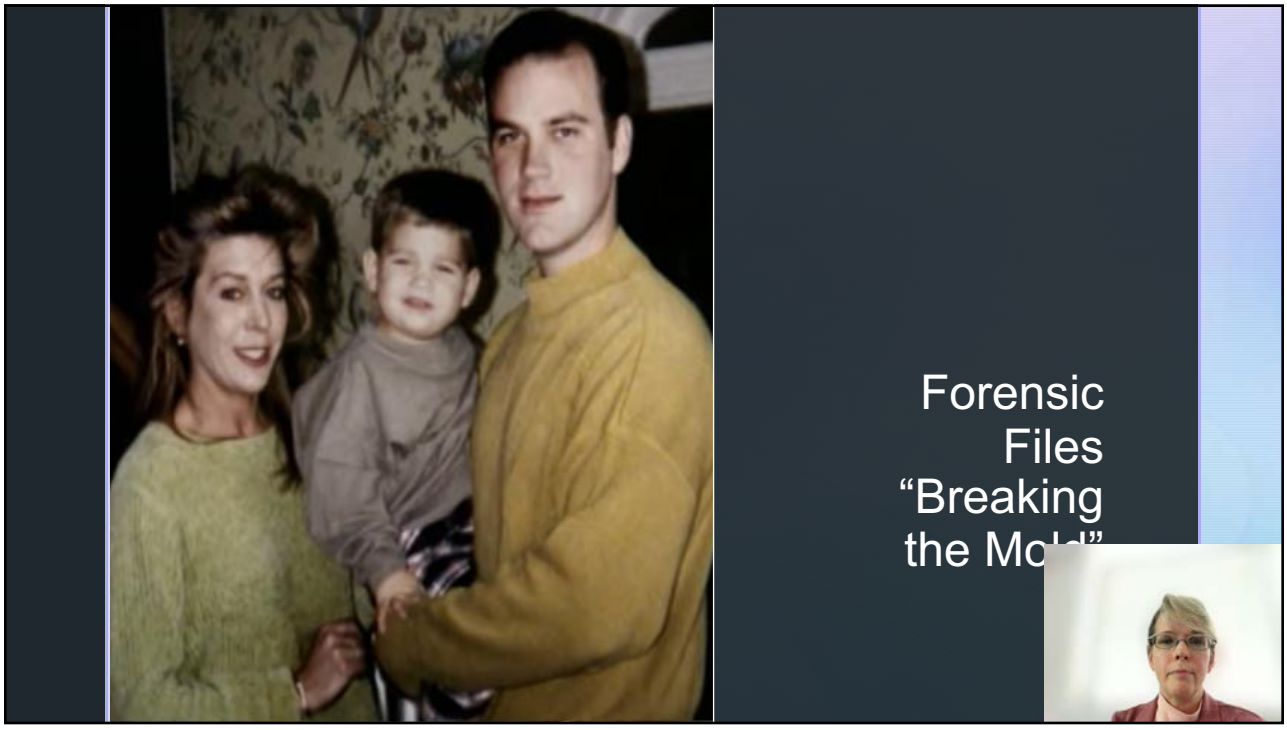

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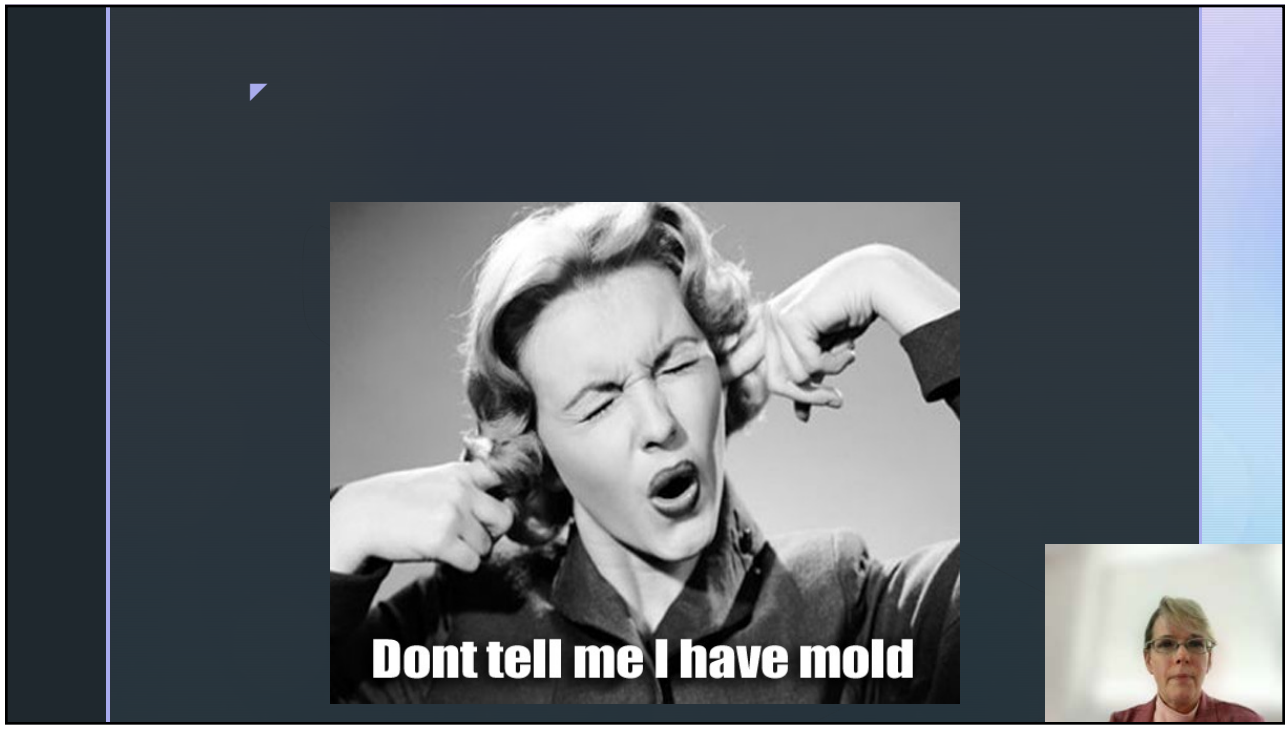

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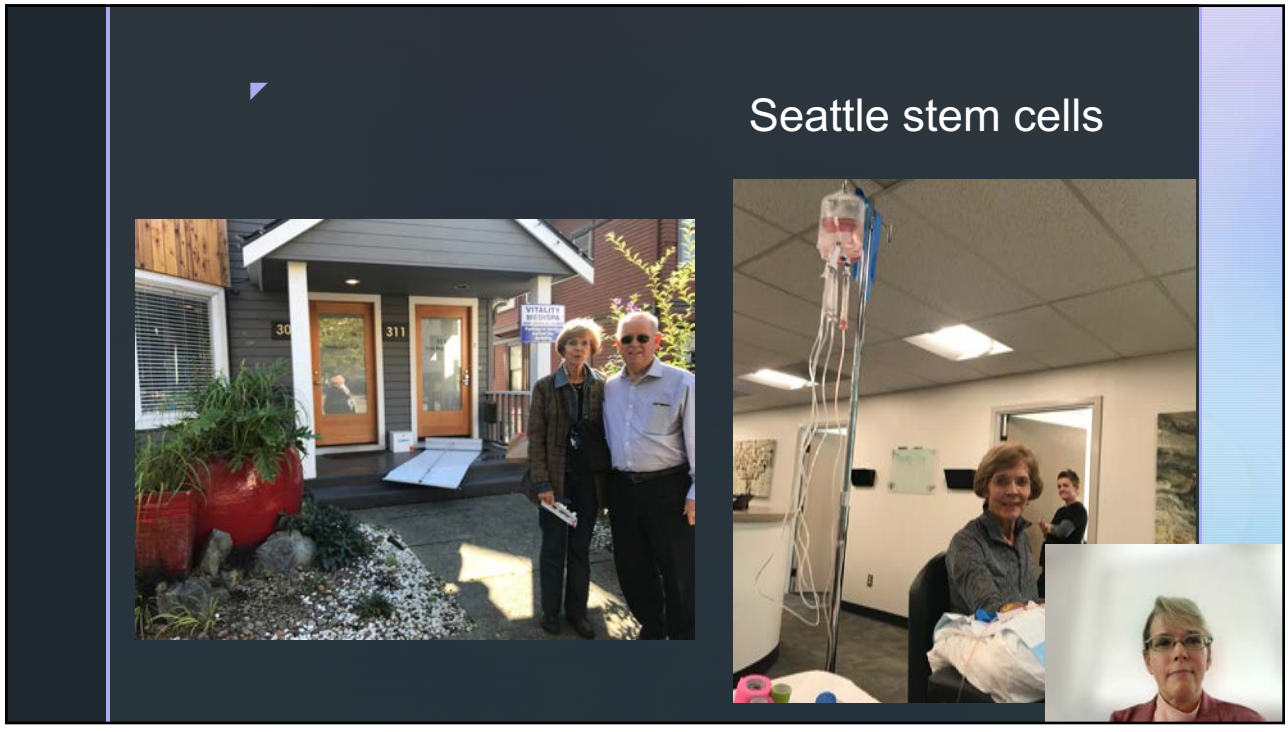

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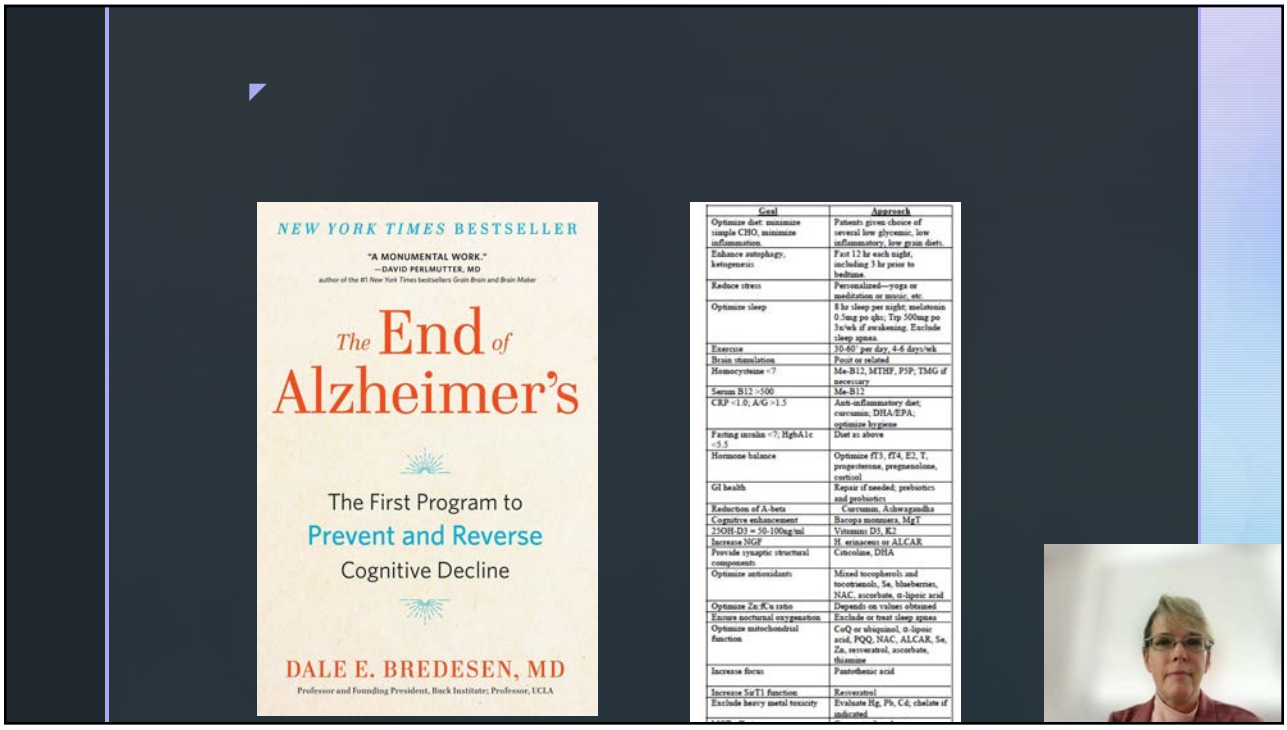
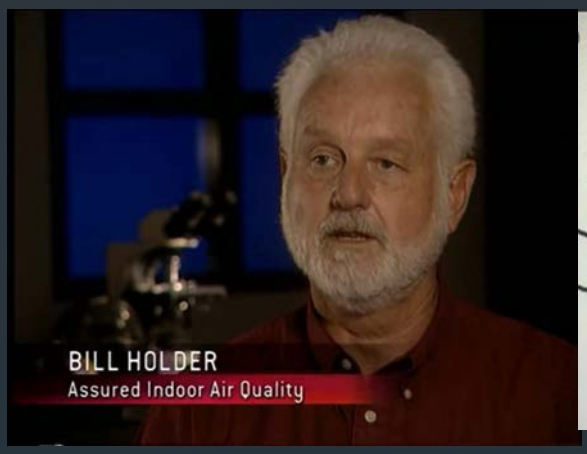


Goal	Approach
Optimize diet: minimize simple CHO, minimize inflammation	Patients given choice of several low glycemic, low inflammatory, low grain diets.
Enhance autophagy, ketogenesis	Fast 12 hr each night, including 3 hr prior to bedtime.
Reduce stress	Personalized—yoga or meditation or music, etc.
Optimize sleep	8 hr sleep per night; melatonin 0.5mg po qhs; Trp 500mg po 3x/wk if awakening. Exclude sleep apnea.
Exercise	30-60' per day, 4-6 days/wk
Brain stimulation	Posit or related
Homocysteine <7	Me-B12, MTHF, P5P, TMG if necessary
Serum B12 >500	Me-B12
CRP <1.0; A/G >1.5	Anti-inflammatory diet; curcumin; DHA/EPA; optimize hygiene
Fasting insulin <7; HgbA1c <5.5	Diet as above
Hormone balance	Optimize fT3, fT4, E2, T, progesterone, pregnenolone, cortisol
GI health	Repair if needed; prebiotics and probiotics
Reduction of A-bets	Curcumin, Ashwagandha
Cognitive enhancement	Bacopa monnera, Mg^{2}
25OH-D3 = 50-100ng/ml	Vitamin: D3, K2
Increase NGF	H. erinaceus or ALCAR
Provide synaptic structural components	Citicoline, DHA
Optimize antioxidants	Mixed tocopherols and tocotrienols, Se, blueberries, NAC, ascorbate, α-lipoic acid
Optimize Zn:Cu ratio	Depends on values obtained
Ensure nocturnal oxygenation	Exclude or treat sleep apnea
Optimize mitochondrial function	CoQ or ubiquinol, α-lipoic acid, PQQ, NAC, ALCAR, Se, Zn, resveratrol, ascorbate, thiamine
Increase focus	Pantothenic acid
Increase SirT1 function	Resveratrol
Exclude heavy metal toxicity	Evaluate Hg, Pb, Cd; chelate if indicated

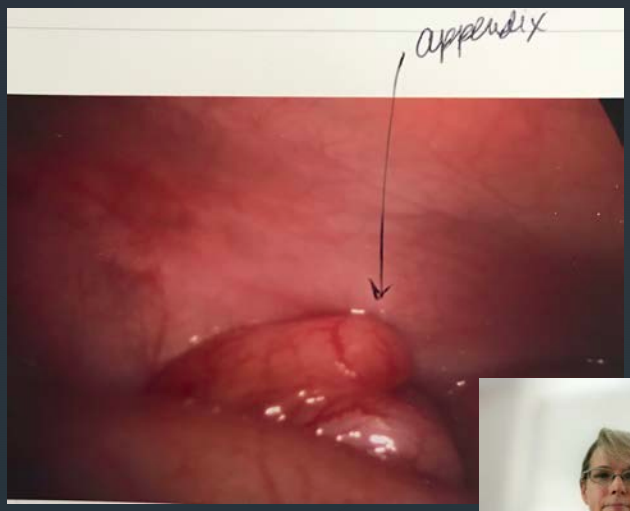
29

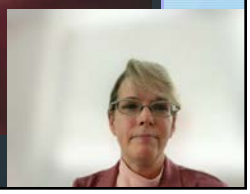
Who ya gonna call?



30

Appendectomy in son at age 6





31

Mercury hair analysis

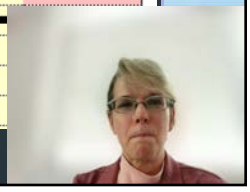
DOCTOR'S DATA INC.

LAB #: H160616-2586-1
PATIENT: Nicholas Mcclure
ID: MCCLURE-N-00161
SEX: Male
AGE: 5

CLIENT #: 35843
DOCTOR: Tom Long Le, MD
Testcountry.Com
6370 Nancy Ridge Dr #105
San Diego, CA 92121 U.S.A.

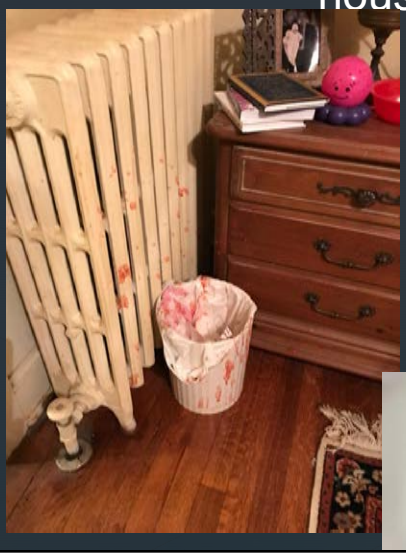
Toxic Element Exposure Profile; Hair

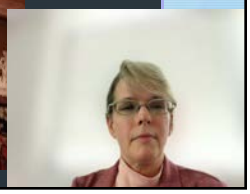
TOXIC METALS		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68th 95th
Arsenic	(As)	0.024	< 0.20	
Lead	(Pb)	0.53	< 6.0	
Mercury	(Hg)	2.6	< 2.0	
Cadmium	(Cd)	0.009	< 0.25	
Chromium	(Cr)	0.36	< 1.0	
Beryllium	(Be)	< 0.01	< 0.050	



32

Kids in San Antonio at my parents house

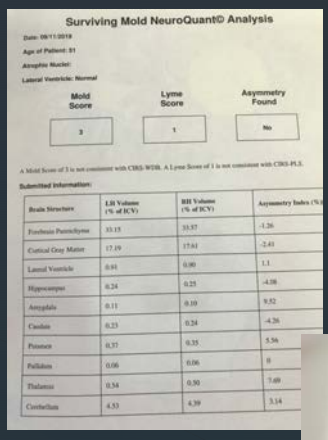




33

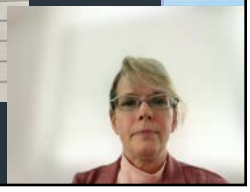
My results

- **VCS**- passed
- **Genetics**
  - 7-2-53(mold susceptible)
  - 13-6-52C(mold susceptible)
- **Inflammatory markers**
  - VEGF <31, C3a-50, C4a- 3544, MMP9-319, TGFbeta-3709, MSH-16
- **Marcons**-positive
- **Neuroquant**- looks good per Dr. Shoemaker
- **Home HERTSMI-2** 20, ERMI-19.2, Actino-N/A
- **Symptoms**- chronic migraines, mild fatigue, decreased word finding, severe xeropthalmia, occasional transient vertigo, static shocks, mild eyelid and digital edema, occasional auditory reverberations


Surviving Mold NeuroQuant© Analysis

Mold Score | Lyme Score | Asymmetry Found

3 | 1 | No



34

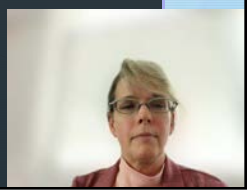
My Genie results

Specific elements of test results: (Y* = yes; N* = no)

Does test show hypometabolism	Y*	N	Low		Post-Protocol	
Ribosomes, large	Y	N	Y	N	Y*	N
Ribosomes, small	Y	N	Y	N	Y*	N
Mitoribosomes, large	Y	N	Y	N	Y*	N
Mitoribosomes, small	Y	N	Y	N	Y*	N
ATP synthase	Y	N	Y	N	Y*	N
COX	Y	N	Y	N	Y*	N
NDUF	Y	N	Y	N	Y*	N
TIMM	Y	N	Y	N	Y*	N
TOMM	Y	N	Y	N	Y*	N

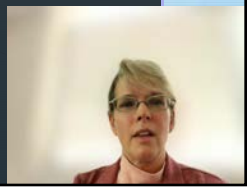
1. Does your test show abnormalities in gene expression for CIRS Biomarkers? Y* N
   IGBP1 is elevated.
2. Does your test show abnormalities in gene expression for apoptosis? Y* N
   CASP10 and FAS are elevated.
3. Does your test show abnormalities in gene expression for coagulation? Y N*
4. Does your test show abnormalities in gene expression for defensins? Y N*
5. Does your test show abnormalities in gene expression for granzyme? Y* N
   GZMM is elevated.
6. Does your test show abnormalities in gene expression for methylation? Y* N
   FAM156A is elevated.
7. Does your test show abnormalities in gene expression for insulin signal? Y N*
8. Does your test show abnormalities in gene expression for Ikaros? Y* N
   F1 and F2 are elevated with F2 being 5.22 and VIPR1 of 1.17.
9. Does your test show abnormalities in gene expression for cytokines? Y* N
   SOCS1 is elevated.
10. Does your test show abnormalities in gene expression for Lyme? Y N*
    Does not show evidence of treated or untreated Lyme disease.
11. Does your test show abnormalities in gene expression for MAPK? Y N*
12. Does your test show abnormalities in gene expression for Toll receptors? Y N*
13. Does your test show abnormalities in gene expression for pain? Y N*
14. Does your test show abnormalities in gene expression for CD markers? Y N*
15. Does your test show abnormalities in gene expression for B-cells? Y N*
16. Does your test show abnormalities in gene expression for T-cell synapse? Y* N
17. **Show CD3D at 3.08 and CD48 is negative.**
18. Does your test show abnormalities in gene expression for Prostaglandin? Y N*
19. Does your test show abnormalities in gene expression for tubulin? Y N*
20. Does your test show abnormalities in gene expression for histamine? Y* N
    HDC is 6.64.
21. Does your test show abnormalities in gene expression for PTSD? Y* N
    Is elevated.
22. Does your test show abnormalities in gene expression for complement? Y N*

Taken as a whole, does this test show problems seen in CIRS-WDB?
We no longer see defining elements of CIRS. HDC suggests systemic histamine problem, not MCAS.



35

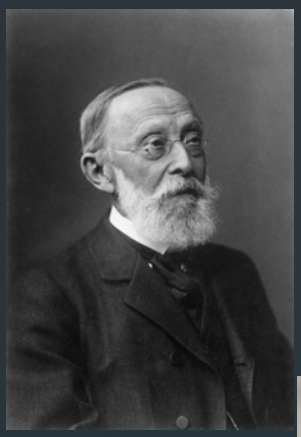
Still here in the moldy house

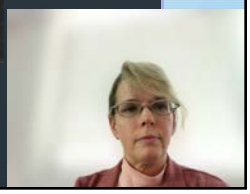


36

Germs don't cause disease, people do

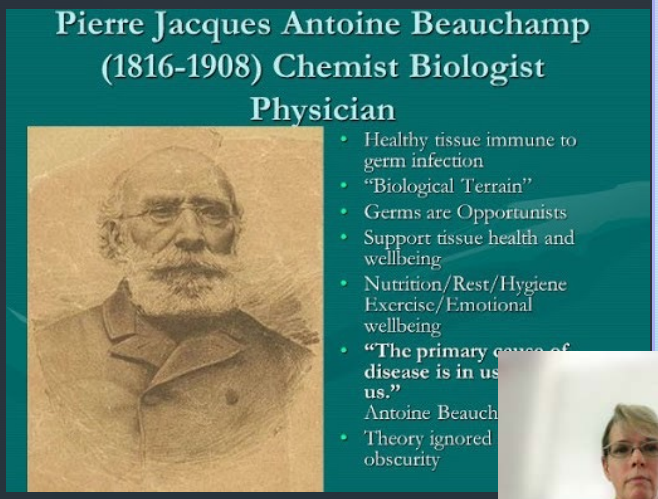
- Rudolf Virchow(German Pathologist 1821-1902)
  - "If I could live my life over again I would devote it to proving that germs seek their natural habitat, diseased tissue, rather than causing disease"





37

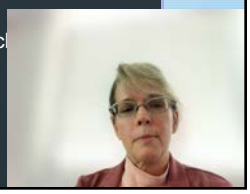
Louis Pastuer and Antoine Beauchamp



38

RR Rife

- A healthy or diseased biological terrain is primarily determined by 4 things
- 1. level of toxicity
- 2. nutritional status
- 3. pH
- 4. electro-magnetic c



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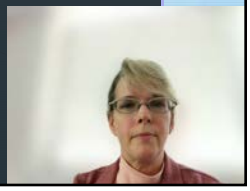
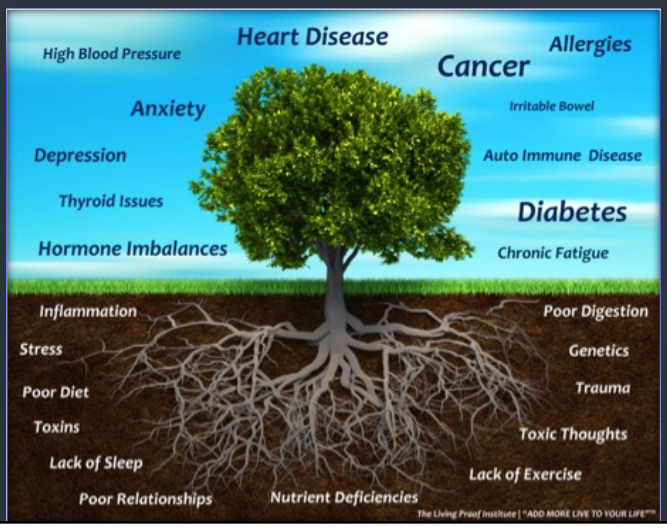
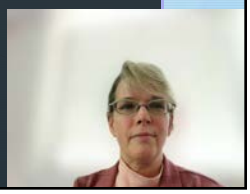


40

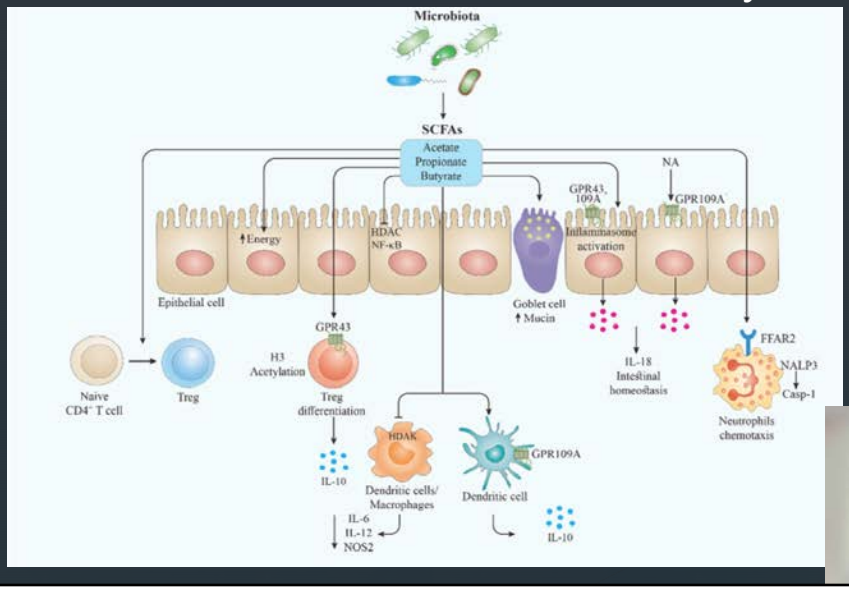
The toxic burden

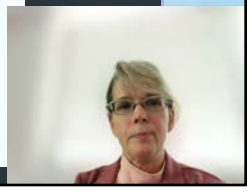




41

Short Chain Fatty Acids





42

Butyrate and other short chain fatty acids(acetate, propionate)

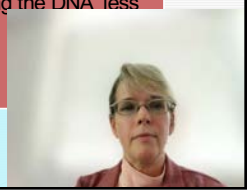
Main endproduct of microbial fermentation of dietary fiber

Maintenance of intestinal homeostasis and overall health status
Regulation of T-regulatory cells
Improved insulin sensitivity

It is well known epigenetic mechanism through the inhibition of HDAC's (histone deacetylase is an enzyme that removes the acetyl group from histone proteins on DNA, making the DNA less accessible to transcription factors)

Results in the regulation of gene expression

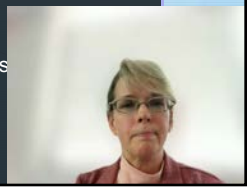
Canfora, E., Jocken, J. & Blaak, E. Short-chain fatty acids in control of body weight and insulin sensitivity. *Nat Rev Endocrinol* **11,** 577–591 (2015). https://doi.org/10.1038/nrendo.2015.128



43

Mechanisms for the environmental regulation of gene expression: Ecological aspects of animal development

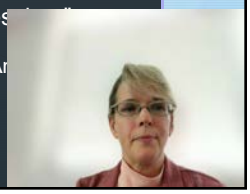
- The environment can play a significant role in the production of phenotypes. However, the developmental mechanisms by which the environmental agents effect normal development are just becoming known. At least three paths have been found through which the environment can modify gene activity.
- **1. neuroendocrine route**. Here, the nervous system monitors the environment and transfers signals to the endocrine system. The endocrine hormones can then alter gene expression.
- **2.** environmental factors that change **the methylation pattern of genes**, thereby altering their transcriptional capabilities.
- 3. The direct induction of gene expression in the host by **microbial symbionts.**
  - Gilbert, S.F. Mechanisms for the environmental regulation of gene express Ecological aspects of animal development. J Biosci 30, 65–74 (2005).



44

Dietary Regulation of Intestinal Gene Expression

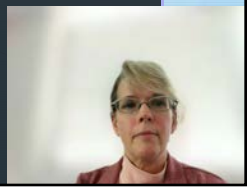
- our environment may alter genes and thus be a direct influence on disease.
- Diet is a potent mechanism for altering the environment of cells of most organs, particularly the gastrointestinal tract.
  - This review addresses the influence of nutritional factors on intestinal gene regulation. These influences include insulin, which is not a dietary component but responds to dietary changes, and butyrate, a short chain fatty acid produced by normal intestinal flora.
  - Manipulation of diet may be a means of treating intestinal disorders. Nutritional treatment therefore is also discussed in the light of its effects on gene expres
    - I.R. Sanderson and S. Naik. Dietary Regulation of Intestinal Gene Expression. An Nutr. 2000. 20:311-38.



45

Fasting and the immune system

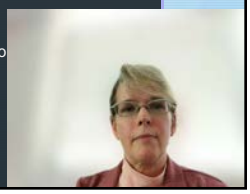
- During intermittent fasting, cells activate pathways that increase their defenses against oxidative and metabolic stress and remove or repair damaged molecules.
- Preclinical studies show the disease-modifying effects of intermittent fasting in animal models on a wide variety of chronic disorders, including obesity, diabetes, cardiovascular disease, cancers, and neurodegenerative brain diseases .
- Periodic opening and closing of metabolism with intermittent fasting not only provides the ketones necessary for cells to use during the fasting period, but also elicits highly regulated systemic and cellular responses to increase mental and physical performance and disease resistance.
  - The Immune System Changes Due to Intermittent Fasting. Cinicaltrials.gov. 2021.



46

Endocannabinoid System

- The endocannabinoid system is widely expressed in the body and deeply involved in the function of the neurological system, body metabolism, and bone homeostasis
- Our research and many other studies have demonstrated immune-regulatory properties for *Cannabis* and cannabinoid-based treatments
- in vitro studies demonstrated that cannabinoids exert microbicidal activity on different bacteria and fungi and could also control viral pathogenesis in some cases
  - Almogi-Hazan O, Or R. *Cannabis*, the Endocannabinoid System and Immunity-the Journey from the Bedside to Back. *Int J Mol Sci*. 2020;21(12):4448. Published 2020 Jun 23. doi:10.3390/ijms21124448



47

My interventions

- Dietary changes- lower carb, low grains, no sugar, no alcohol, increase in fruits and vegetables, lower meat intake, tea and water only, stevia for sweetener
- Intermittent fasting – at least 12 hours daily
- Supplementation- vit D, magnesium, iodine, complex B vitamins, melatonin, CBD oil, bioidentical hormones
- Some exercise-walking, light weights and aerobic
- Sleep 7-9 hours
- Positive Mindset("Every cell in your body is Eavesdropping on your thoughts"- *Depak Chopra*

48

Other interventions I have made

- No plastic containers, bottles for food/drink
- Low/no VOC's- carpet, paint, furniture, clothing
- Mitigation of dirty electricity/EMF- Thank you Larry Swartz!
- Air Filtration systems for HVAC and portable units for travel
- Infared sauna
- Low mercury diet and dental mercury amalgam removed by Biological dentist June 2022

49

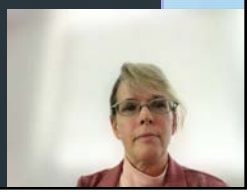
Contributing factors to healing from CIRS for me

- Insulin resistance
- Nutrition-
  - everything you eat is taking you towards health or towards disease
- Weight loss
- Gut microbiome
- Vit D status
- Supplements- CBD, melatonin, vit C
- Exercise/sleep/mindset

50

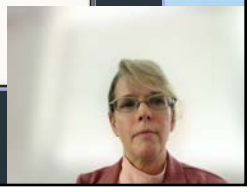
Why me?

- Is it my HLA in conjunction with these things?
- Could someone with multisusceptible gene have a similar outcome with the same approach?
- Is the quantitative amount of mycotoxins or the specific species important or the presence of Actinomyces?
- Are there co-factors at play
  - Mercury
  - EMF, dirty electricity
  - Toxins in the water
  - Glyphosate
  - Our own thoughts/beliefs
  - Telomeres/degradation rate of telomeres

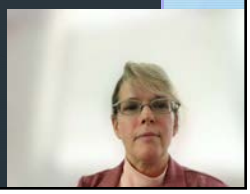


51

Chakravarti D, LaBella KA, DePinho RA. Telomeres: history, health, and hallmarks of aging. Cell. 2021 Jan 21;184(2):306-322. doi: 10.1016/j.cell.2020.12.028. Epub 2021 Jan 14. PMID: 33450206; PMCID: PMC8081271.



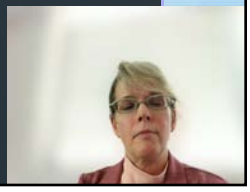
52



53

Dermatologic manifestations of CIRS that I have seen

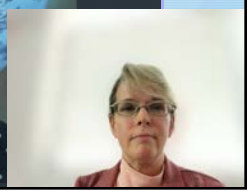
- Alopecia(hair loss) is probably the number one thing I have seen
- Eczema/allergic contact dermatitis
- Rosacea/acne
- Vitiligo
- Delusions of parasitosis
- melanoma and lichen planopilaris ?- these conditions have skyrocketed over the past 5 years or so in my practice



54

Alopecia Areata to Totalis-

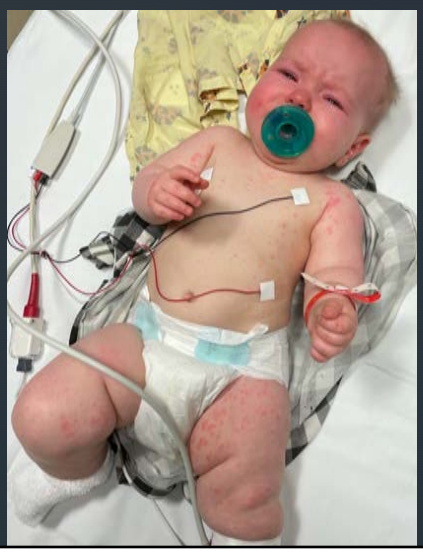
pictures included with permission

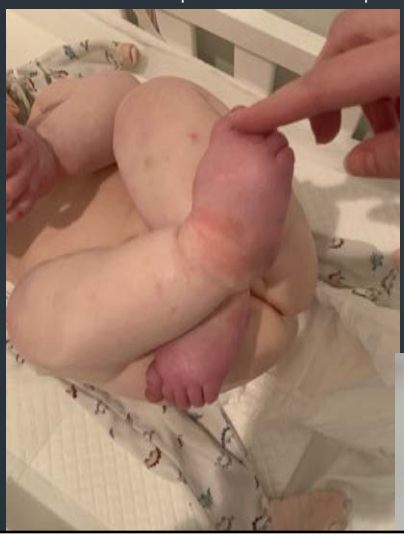


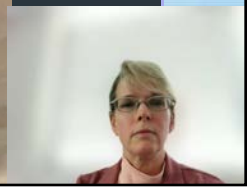
55

Stevie- different cutaneous manifestations of inflammation-

pictures included with permission

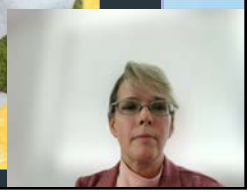






56

Stevie- different cutaneous manifestations of inflammation



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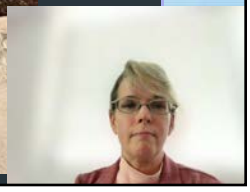
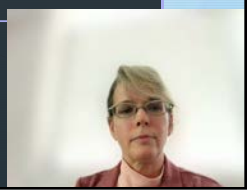


58

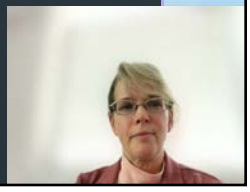
Books that inspired me

- Mold Warrior and Surviving Mold by Ritchie Shoemaker
- Toxic by Neil Nathan
- The End of Alzheimers by Dale Bredensen
- Dirty Genes by Ben Lynch
- The Ultramind Solution by Mark Hyman
- EMF, A Practical Guide by Lloyd Burrell
- Spontaneous Healing by Andrew Weil



59

Thank you to the CIRS community



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