

Women's Health Conference 2017



NAME:



Conference Schedule

AUDITORIUM

UPSTAIRS

10:00 am Mammography Technology -
Dr. Myka Veigel

10:45 am Types of Living -
Dr. Clay Campbell

11:25 am What's Eating You?
Anya Anthony, PA

12:00 pm LUNCH Doctor Google -
Dr. Lance Hansen

1:00 pm Keynote - Merrilee Boyack "Confessions of a Hamster on a Wheel"

2:00 pm It's Only Skin Deep -
Dr. Peter Crane

2:50 pm This is Your Brain
on Adolescence - Bobbi
Kelsey, MSW, LCSW

10:45 am Dysfunctional Uterine
Bleeding - Dr. Khristina Meissner

11:25 am Under Pressure -
Dr. Trevor Jacobson

2:00 pm Occupational and Speech
Therapy - John Beenfield
and Mandy Tingey





Dr. Myka C. Veigel is a diagnostic radiologist certified by the American Board of Radiology. He attended medical school at Kansas City University of Medicine & Biosciences, graduating with high honors in 2008. Subsequently, he completed a five year diagnostic radiology residency at the University of Missouri – Kansas City, where he was awarded the most outstanding graduating resident by faculty & peers. Dr. Veigel then completed a one year musculoskeletal radiology fellowship at the University of Iowa. He joined Medical Imaging Associates of Idaho Falls in July 2014. Dr. Veigel's primary hobby is his family. He & his wife grew up in Star Valley, WY, & upon returning to this region, have again made it their home. Together they have five sons ranging in age from 5 to 15.



Dr. Clay Campbell is a solo family practitioner who received his Bachelor of Science Degree from Bucknell University & his Medical Doctorate from the University of Oklahoma. He completed his family practice residency for the Family Practice Residency of Idaho in Boise, Idaho & was board certified by the American Board of Family Practice in July 1994, 2000, & 2013. He served as Chief of Staff for BLMH from 1996-97, 2003-04, & 2009. He is the Medical Director for the BLMH's Home Health & Mental Health. He served as a board member of the Bear Lake Valley Health Care Foundation from 1996-98. He has previously been a board member of the Idaho Academy of Family Physicians & has affiliations with both the University of Washington as a preceptor & with Idaho State University as Affiliate Faculty.



Dr. Khristina Meissner studied at University of Pikeville, Kentucky College of Osteopathic Medicine & earned her undergraduate degree in Biology with a minor in Chemistry from Midway College in Kentucky. She is from Waynesville, North Carolina & with a lifelong desire to live in the West, moved to Idaho for her Residency. Dr. Meissner enjoys spending time with her family, hiking, skiing, outdoor activities & horseback riding. She is looking forward to practicing full-spectrum family medicine in Montpelier, Idaho.



Anya Anthony obtained her P.A. graduate degree from Western University in Pomona, California. Prior to moving to Bear Lake, she worked at a Community Clinic in California for four years. After having a positive experience with a physician's assistant in an emergency room & doing some research on the position, Anya knew that's what she really wanted to do. She went back to school, while still working full time & raising a family, to earn her degree. Anya feels she has a lot to offer the community by providing a variety of health services.



Dr. Trevor Jacobson is practicing at Bear Lake Memorial Hospital Internal Medicine Clinic. He received a Bachelor's Degree in Exercise Physiology, Medical Degree, & Family Medicine Specialty Degree all at the University of Utah. He is Board Certified as a Family Practice Physician with experience in pediatrics, sports medicine, weight loss management, women's health, mental health, addiction, & disease prevention. Dr. Jacobson is the son of Kevin & Brenda Jacobson of Ovid.



Dr. Lance Hansen started at the Family Care & OB Practice at BLMH in August of 2012. He is originally from the Snake River area near Blackfoot, ID. He received his Bachelor of Science in Biology at the Albertson College of Idaho. Then finished his Doctorate of Medicine at the University of Washington. He completed his residency with the Family Medicine Residency of Idaho in Caldwell, ID. He was Chief Resident during his third year. His practice focuses on family health, including pediatrics & OB services. He also specializes in upper endoscopies & colonoscopies.



Dr. Peter Crane started his Medical Practice on the campus of BLMH in September of 2011. He graduated from Bear Lake High School in 1997. He went on to graduate from Brigham Young University in microbiology. He received his Doctorate of Medicine Degree from the University of Utah. He completed his family medicine residency at Ball Memorial Family Medicine Residency in Indiana & held the Chief Resident position. He has made several medical service trips providing healthcare to people in Ecuador, Kenya, Mexico, & Uganda. His practice focuses on family health, including pediatrics & OB services. He speaks Spanish & Portuguese.



John Beenfield, OTR/L received his Bachelors Degree in Biology from Southern Utah University & his Master's Degree in Occupational Therapy from the University of Utah. As an occupational therapist, John assists in rehabilitation & helps people gain independence in their life through performing functional self-care tasks. John also treats upper extremity dysfunctions involving the hand. John enjoys outdoor recreation, music, & spending time with his wife & two children.



Bobbi Kelsey, MSW, LCSW is a 2006 graduate of Bear Lake High School. After spending three years on the east coast, she has returned to the Bear Lake Valley to continue her career closer to her family. In 2010, Bobbi graduated Magna Cum Laude from Utah State University with a Bachelors of Science in Social Work, with Minors in Sociology & Human Development, & a certificate in Law & Society Studies. She earned her Masters of Social Work from The State University of New York of Buffalo in 2011. As a licensed Masters in Social Work, Ms. Kelsey also holds certification in Trauma-Focused Cognitive Behavioral Therapy & Child & Adolescent Needs & Strengths. She has previous experience working with families, adolescents & children at the Cache Valley Youth Center in Logan, Utah, at Hillside Children's Center in West Seneca, New York, & at Carlbrook School in South Boston, Virginia.



Mandy Tingey, SLP comes highly recommended and has a wide variety of experience, especially with the pediatric population. She is excited to get to know the community.



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See Keynote Speaker - Merrilee Boyack's biography on the back of the booklet.

Bear Lake Memorial Hospital



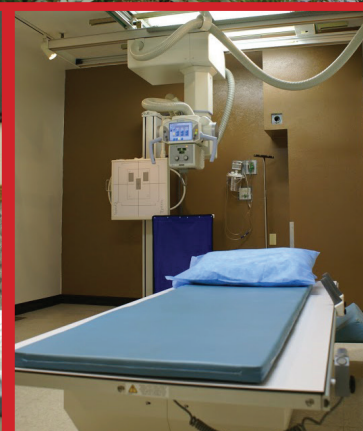
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- Occupational Therapy
- Skilled Nursing Facility
- Home Health Services
- New Hope Weight Loss Clinic
- Private Patient Rooms
- Assisted Living Center
- Respiratory Therapy
- Chemotherapy



Notes:

Notes:

Mammography Technology - Dr. Myka Veigel

What is a Radiologist?

- Radiologists are medical doctors (MD) or doctors of osteopathic medicine (DO) who specialize in diagnosing and treating diseases and injuries using medical imaging techniques, such as x-rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography (PET) and ultrasound.
- Radiologists graduate from accredited medical schools, pass a licensing examination, and then go on to complete a residency of at least four years of unique post-graduate medical education.

Breast Cancer Overview₁

- Disease that results from cells in the breast which **change** and **grow out of control**.
- Excluding cancers of the skin, **breast cancer is the most common cancer among U.S. women**.

Breast Cancer Overview₂

- Lifetime risk **12.4%** (1 in 8 women)
- **252,710** estimated new cases of invasive breast cancer in U.S. women in 2017.
- **40,610** deaths
- Overall, **5** year survival is **90%**

RISK FACTORS

- Family History
- Genetic mutations (BRCA1 and BRCA2)
- Dense breast tissue
- Obesity in postmenopausal women
- Alcohol consumption
- Tobacco use (may)
- Postmenopausal hormones
 - Risk appears to diminish within five years of discontinuation.
- Hormonal birth control (small increase)
 - Appears to diminish when stop taking the pill and after ten years, similar to those who have never taken oral contraceptives.

Breast Cancer Overview₁

SIGNS & SYMPTOMS:

- Most commonly asymptomatic
- Most common physical sign – painless lump
- Less common
 - Breast pain or swelling
 - Skin thickening or redness
 - Nipple discharge (bloody)
 - Nipple retraction and/or erosion
- **Any persistent change in the breast should be evaluated by a physician as soon as possible.**

Breast Cancer Diagnosis by Age₂



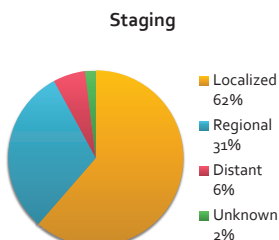
70% are ages **45-74**

Importance of Early Cancer Stage₂

5 YEAR SURVIVAL RATES

- Localized **99%**
(Confined to primary site)
- Regional **85%**
(Lymph node involvement)
- Distant **27%**
(Distant Metastasis)

PERCENT OF CASES BY STAGE

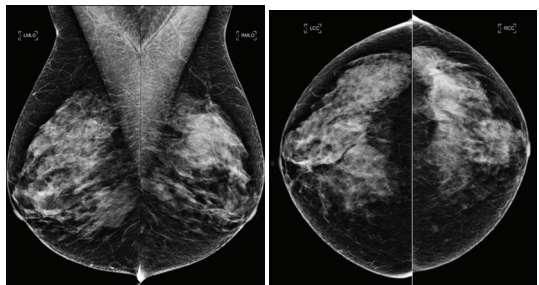


Breast Cancer Screening

Diagnostic Imaging

- Mammography
 - Film (2D)
 - Digital (2D)
 - **Digital Breast Tomosynthesis (3D mammography)**
- MRI
- Ultrasound

Mammography is the **only** method of screening for breast cancer shown to decrease mortality₃



U.S. Preventive Services Task Force₅

- **Ages 50-74:** Screening mammography every other year (Grade B: High certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial)
- **Age <50:** Individual decision and take patient context into account. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between ages 40-49 (Grade C: There is at least moderate certainty that the net benefit is small)
- **Age >75:** Not enough evidence to make a recommendation. (Grade I: Current evidence is insufficient to assess the balance of benefits and harms of the service)

American College of Radiology₄

- Average asymptomatic women: Annual mammograms beginning at age **40**.
- Patient's with a first degree relative with breast cancer: Begin screening **10 years prior** to the relative's diagnosis, but not before age 25.
- Women with history of chest radiation between ages 10-30: Begin screening **8 years after radiation** therapy, but not before the age of 25.
- Women with known mutation or genetic syndrome or untested women with first degree relative with BRCA gene mutation: **Yearly by age 30**, but not before age 25.
- Screening mammography should be considered as long as the patient is in good health and is willing to undergo additional testing, including biopsy, if an abnormality is detected.

American Cancer Society₆

- **40-44:** Women should have the opportunity to begin annual screening.
- **45-54:** Women should be screened every year.
- **Age >55:** Women should have mammograms every 2 years or the opportunity to continue annual screening.
- Women should continue screening mammography as long as their overall health is good and they have a life expectancy of 10 years or longer.

Importance of Early Cancer Stage₂

5 YEAR SURVIVAL RATES

- Localized **99%**
(Confined to primary site)
 - Regional **85%**
(Lymph node involvement)
 - Distant **27%**
(Distant Metastasis)
- **EARLY** detection is important.
 - Visit with your health care provider to discuss what is best for you in regards to screening mammography.

Screening Mammogram v. Diagnostic Imaging

SCREENING

- Preventative x-ray procedures used to evaluate for signs of breast cancer in patients who do not have symptoms
- **9** out of **10** screening mammograms are negative
- Less than **10%** requiring further evaluation with a diagnostic mammogram or ultrasound are found to have cancer

DIAGNOSTIC

- Evaluate areas of possible concern identified by the radiologist on the screening mammogram
- Evaluate a specific symptom, such as new lump, pain, discharge, or skin changes

BLM Breast Imaging Team:



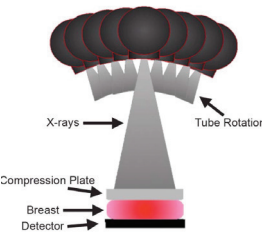
Screening at Bear Lake Memorial – 3D Mammography

- Digital breast tomosynthesis (DBT) or 3D mammography
- Several studies confirm that cancer detection rate is increased in comparison to 2-D mammography alone₃
- Rate of recall for benign findings can be decreased₃



3D Mammo – How it Works

- Multiple low-dose x-rays
- Performed in an arc
- Projection images used to reconstruct a 3D image
- Can manipulate thickness to as little as 1 mm
- Breast positioning CC & MLO



Living Options - Dr. Clay Campbell

When Is The Right Time?

- Depends on innumerable factors
- Health of individual
- Family Resources: financial, time, available individuals, space
- Finances
- Individual vs couple
- Desire of individual

**DON'T EVER PROMISE A FAMILY MEMBER THAT
YOU WON'T PUT THEM IN A FACILITY!!!!**

You can't predict future events in life

Beginning the discussion

Individual not eager to move, many happy memories

Change can be hard

Discuss when individual is still healthy

Raise issue indirectly using examples of others

Find small ways to bridge the issue

Share your own feelings and observations

Set the right tone: Don't guess or make assumptions

"Avoid parenting your parents"- be respectful

Key Issues

Where they live- is home still appropriate for needs

Their everyday activities

How they get around

Health issues- being involved in their healthcare is helpful

Finances- getting prepared

DEALING WITH RESISTANCE

Respect feelings- try to discuss later or with different approach

Might have to push issue in a crisis/emergency (not ideal)- be firm but compassionate

Involve other family members/friends- hold family meeting

Find out about community resources

Be prepared to let individual make own choices, even if you don't agree (unless a true safety issue or competence issues)

Housing Choices

Current home- make accommodations, etc.

Age-restricted communities

Senior apartments (Aspenwood Apts, 62yo and older)

Assisted living

Skilled Nursing Facility

Continuing Care Retirement Communities

Multi-generational Housing

3 generations in same home

16.7% live in home with at least 2 adult generations

10.5% increase from 2007-2009

In 2009: 9.4% Asian, 9.5% African American, 10.3% Latino, 3.7% non-Hispanic white households

US 65+ population expected to more than double to 92 million 2060

82% brought family members closer, 72% said better finances, 75% saw care benefits

2012: Nationwide annual cost SNF private room \$90,520, semiprivate \$81,030, assisted living \$42,600

Common during Great Depression, increasing again with recent recession

Things to Consider

Discuss expectations and responsibilities before move

Discuss parental responsibilities with other siblings

Include age-friendly and privacy features if remodeling

Divvy up chores

Accept realities: personalities and habits don't change

Concerns: family friction, strain on spouse, less opportunity for work and personal time

Dr. Campbell's Office: 847-3847

Dysfunctional Uterine Bleeding - Dr. Khristina Meissner

WHEN IS BLEEDING ABNORMAL?

- Bleeding or spotting between periods
- Bleeding or spotting after sex
- Heavy bleeding during your period- Soaking through more than 1 pad/tampon per hour
- Menstrual cycles that are longer than 38 days or shorter than 24 days
- Abnormal period length that is greater than 8 days
- Irregular periods in which cycle length varies by more than 7-9 days
- Bleeding after menopause

WHAT CAUSES ABNORMAL BLEEDING ?

- Problems with ovulation
- Hormone Imbalance
- Fibroids or Polyps
- Bleeding Disorders
- Problems with birth control methods such as IUDs or birth control pills
- Pregnancy
- Miscarriage
- Ectopic pregnancy
- Uterine cancer
- Infection of the cervix

AT WHAT AGE IS ABNORMAL BLEEDING MORE COMMON?

- Abnormal bleeding can occur at any age.
- In most women, abnormal bleeding is caused by a hormone imbalance.
- It is common for periods to be somewhat irregular when a girl first starts having periods from 9-14 years old.
- During perimenopause the number of days between periods may change.
- It is also normal to skip periods or for bleeding to get lighter or heavier around menopause.

CAUSES OF ABNORMAL BLEEDING BY AGE

Teens, 20s and 30s

- Pregnancy, birth control pills, IUDs.
- Abnormal bleeding can occur if a woman doesn't release an egg from their ovaries during their cycle
- Estrogen can make the lining of your uterus grow until it gets too thick and bleeding becomes heavy when your body has a period to get rid of the lining.
- A hormone imbalance can also cause your body not to know when to shed the lining which can cause spotting.

Women in the 40s and Early 50s

- Around menopause ovulation becomes irregular causing heavy periods and irregular bleeding.
- Thickening of the uterus can occur.

After Menopause

- Hormone replacement therapy.
- Endometrial and Uterine cancer.

HOW IS ABNORMAL BLEEDING DIAGNOSED?

Your healthcare provider will talk to you about your health history.

- It is helpful to keep track of your menstrual cycles noting the dates, length and type of period (light, medium or heavy).

Tests that may be performed:

- Blood tests - CBC to check for anemia, hormone levels, pregnancy test, and tests for sexually transmitted infections.
- Ultrasound - To examine the pelvis and look at the uterus and ovaries.
- Hysteroscopy - A scope that allows your provider to see the inside of the uterus.
- Endometrial Biopsy - A sample of the inside of your uterus is removed and looked at under a microscope.
- Sonohysterography - Fluid is placed in the uterus through a tube while ultrasound images are taken
- Computed tomography (CT scan).

WHAT MEDICATIONS ARE USED TO CONTROL ABNORMAL BLEEDING?

- Birth control methods such as pills, skin patch, vaginal ring, or IUD keep the lining of the uterus from getting too thick and keep your cycle regular.
- Gonadotropin releasing hormone agonists- Can stop the menstrual cycle and reduce the size of fibroids.
- NSAIDS - Motrin, Naproxen, Advil, ect.
- Antibiotics.
- Other medications such as medications for bleeding disorders.

WHAT TYPES OF SURGERY CAN TREAT ABNORMAL BLEEDING?

- D&C (Dilation and Curettage)- Your cervix is dilated so that a tool can be used to scrape away the lining of your uterus.
- Endometrial Ablation - Destroys the lining of the uterus to stop or reduce the amount of bleeding. Pregnancy is not likely after this procedure.
- Uterine Artery Embolization - Used to treat fibroids. Blocks the blood vessels to the uterus and stops growth of fibroid.
- Hysterectomy - Surgical removal of the uterus.

Dr. Meissner's BLMH Office: 847-1110

What's Eating You? Anya Anthony, PA

847-3847

Recognizing your behaviors is the start to really changing them.

- DIETS- strict control of diet/ Bariatric surgery; foods/ types/amount, work for most initially, but then destructive eating behaviors return and so does the weight

■ EMOTIONAL HUNGER

- No physical cues (quiet stomach)
- Mindless eating
- Specific craving (like chocolate)
- Eating food feels like the only/best option
- Little time has passed since your last bite
- Food doesn't totally satisfy
- **Wandering around the kitchen, searching**

■ PHYSICAL HUNGER

- Stomach growling/low energy
- Thinking/considering healthier options
- Hunger grows slowly
- Time has passed since last meal
- Food is satisfying
- Don't deprive yourself,... "modify"

12 INDICATIVE SIGNS OF EMOTIONAL EATING



1. You **eat** when you are **stressed**
2. You **eat** as a response to **your emotions**
3. You **seek solace** in **food**
4. You have **trouble losing weight** (due to the way you eat).
5. Your eating is **out of control** (You can't stop yourself from eating)
6. You eat to **feel happy**
7. You eat **when you feel happy**
8. You are **fascinated** with **eating / food**
9. You use **emotionally-charged** words to **describe** food / eating
10. You **eat** even though you are **rightfully full**
11. You **think of eating** even though you are **rightfully full**

WHAT NEXT?



PHYSICAL- if yes, then eat. Consider...

- Healthy vs unhealthy eating. Have a plan.

EMOTIONAL – NO eating!!!...Instead

- **Distract**- leave kitchen, keep hands busy, connect, clean, read, exercise/move, mindless activity*
- **Soothing**- relax, Breathe deeply, sleep/lay down, unplug from electronics, be social/connect, soothe body/comfy clothing
- **Counselling**- if clinical depression, anxiety or stressors contributing, consider an appointment with Behavioral Health.

| | | | | | | | | | | |
|-------|----------|-------------|--------------|------------------|---------|----------------|----------------------|------|---------|------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Empty | Ravenous | Over-Hungry | Hunger Pangs | Hunger "awakens" | Neutral | Just Satisfied | Completely Satisfied | Full | Stuffed | Sick |

- Write down how long it took to eat your meal or snack from first bite to last (number of minutes).
- **Keep for AT LEAST 3 days prior to each of your dietitian appointments and bring them with you.**

| Date/Time | Amount | Food | Conditions: Where/What Doing/How You Felt? | Hunger Scale | | How Long? |
|-----------|---------|--------------------------------------|--|--------------|-------|-----------|
| | | | | Before | After | |
| Nov. 12 | | | | | | |
| 8:20 | 1 slice | 100% whole wheat toast | Sitting at counter, reading paper | 3 | 6 | 8 min. |
| | 1 Tbsp | Chunky Jiff peanut butter (on toast) | | | | |
| 10:30 | 12 oz | Starbucks Latte with 2% milk | Drive-thru/in my car | 5 | 6 | 20 min |

- Write down all foods during or right after eating- waiting until end of day leads to guestimates and forgetting
- Include all descriptions you can, brand name, preparation bake fried, restaurant, sauces/dips/dressings
- Use a measuring cup /spoons or food scale when possible to determine accurate amounts
- Note the conditions while you are eating- stressed, bored, tired, party/ in a car, room in house, seated in front TV, bed, computer
- Hunger scale: how hungry were you before and after/ how long did it take you to eat

Don't try to make it look good, need to see your current eating behaviors in order to make changes- see your triggers.

"CLEAN YOUR PLATE": "There are poor people starving in Africa (or China)"

"NEVER THROW AWAY FOOD"- It's going to WAIST/WASTE one way or another .

WHO ARE YOUR SABOTEURS? Who brings you treats or drops offs treats knowingly, after saying "no thank you" , "I'm trying to change my eating behaviors" or is your "Let's go out for a treat," "Maverick RUN!" buddy?

SOCIALIZING ALWAYS ASSOCIATED WITH FOOD-(mindful eating)

WAITING TOO LONG TO EAT- "I'm starving"- funny how many BAD foods are readily available and "fast."

Moving Forward - Plan Ahead

Do not let yourself get overly hungry; Keep a fairly healthy snack in your desk, your purse or car for when you feel physical hunger; Pack your lunches.

Stop yourself when grabbing or grazing bites of food in a "mindless manor"- can still spit it out... catch your self and stop , "JUST SAY NO"

Make one small goal for change each week, carry it over and add new goal; Don't pick difficult goals; No cheese on my burger, no French fries, Balsamic dressing vs Ranch, ½ the amount of Ranch, drink more water, leave food on plate; more activity even if small increase, keep adding and these goals add up to behavior changes.....

Review your Food Behavior Record with professional; get recommendations, discuss difficulties and come up with a plan-

-THE SCALE lets you know where exactly you stand. Use it!

-THE SCALE lets you know if your behavior got away from you or if you are moving in the right direction

-THE SCALE doesn't judge you... we are toughest on ourselves

Under Pressure- Dr. Trevor Jacobson

- Normal blood pressure <120/80
- Prehypertensive 120-140/80-90
- Hypertension >140/90

Risk Factors

Age- advancing age more likely hypertensive

Obesity- and even weight gain

Family History- if both parents have high blood pressure, twice as likely to have it

Race- higher in blacks

High salt diet

Physical inactivity

Alcohol- women greater than one per day, men 1-2 per day

Personality traits- Anger, Anxiety, Depression, Impatience

Why do we care?

Left ventricular hypertrophy

Heart Failure

Leading cause of stroke

Leading risk factor for heart attack

Major cause for kidney failure

Some studies show chance of heart attack and stroke is essentially 0% for anyone who's blood pressures is less than 130/80 and cholesterol remains at goal without medications.

What can do to keep my blood pressure low without medications?

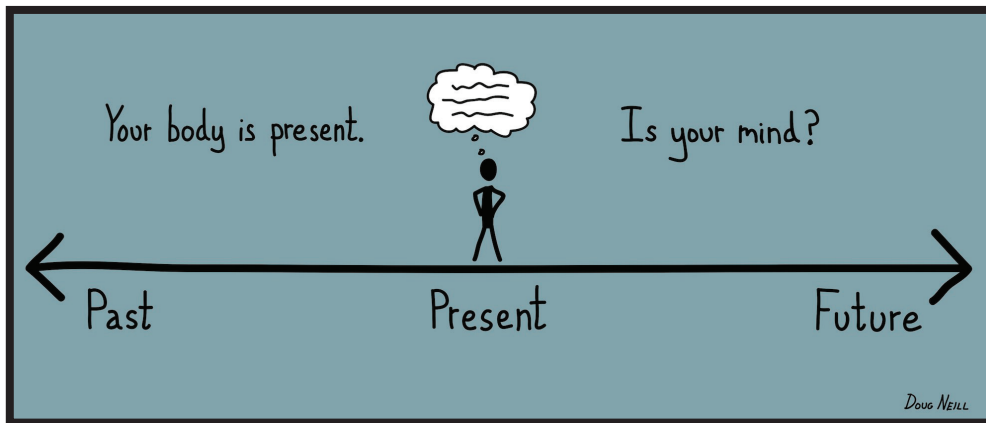
Diet- low carb (low salt)

Weight loss

Exercise

Limit alcohol

Change personality traits that put you at risk.



Empower yourself

Strengthen mind

Mindfulness

Guided meditation

Relaxation exercises

Regular exercise- yoga (Brenda Jacobson free class), walking, riding bike, swimming

Be present

Eat healthy

Get sleep

Research online

Ted talks

Gaiam yoga videos

You tube

Dr. Jacobson's Office: 847-1110

Doctor Google - Dr. Lance Hansen

Dr Google: The Good

- Information is readily available
 - May help in decision to seek care or not
 - Can find lifestyle interventions that may prevent need for doctor visit or medications (gerd, insomnia, back pain)
 - Reduces paternalistic relationship with physician—>shared decision making
 - Better informed—ask better questions, arrive at better decisions
 - Help doctors avoid medical mistakes/misdiagnosis
 - Higher patient satisfaction when educated
 - Doctor can explain why cancer is or is not likely
 - Increased engagement in health

Dr Google: The Good

- Information is readily available continued
 - Picture is worth a thousand words (vertigo tx on youtube)
 - After correct diagnosis, numerous helpful resources for treatment/education concerning diagnosis (much more than 20 min w/ doctor)
 - Info can be tailored (language, education level, etc)
- Support
 - online forums, support groups, discussion boards (i.e cystic fibrosis, diabetes, etc)
- Anonymity with sensitive topics
- Studies are showing that healthcare professionals improve differential diagnosis with online help

Which is better at diagnosis? Computer Algorithms vs. Doctor

- Harvard Study
 - 45 Vignettes/Clinical Scenarios
 - Contained medical hx, no PE or labs/imaging
 - Acuity (15-high, 15 medium, 15 low)
 - Conditions (26-common, 19-uncommon)
 - 23 different symptom checkers vs. doctors (314)
 - Family Med, Internal Med, Pediatrics
 - 30% attendings, 52% residents, 18% interns
 - Goal of Study: Compare diagnostic accuracy
 - Correct diagnosis/In top 3 of most likely diagnoses

Computer Algorithms vs. Doctor

- Results:
 - Listing correct diagnosis first—doctors=72%, symptom checkers=34%
 - Listing correct diagnosis in top 3—doctors=84%, symptom checkers=51%

| Remember that this does not include PE, labs, imaging to help with diagnosis | % of correct diagnosis | Doctor Top Choice | Computer Top Choice | Doctor Top 3 | Computer Top 3 |
|--|------------------------|-------------------|---------------------|--------------|----------------|
| | High Acuity | 79% | 24% | 89% | 39% |
| | Low Acuity | 65% | 40% | 78% | 57% |
| | Common Diagnosis | 69% | 38% | 83% | 55% |
| | Uncommon Diagnosis | 75% | 28% | 86% | 45% |

Dr. Google: The Bad

- Internet Health Information Pitfalls
 - disorganized
 - overly technical language
 - lack of permanence
 - ? up to date info
 - lack of regulation/peer review
 - anyone can fake authority/medical expertise
 - Quality/Validity/Accuracy of information
 - Does the consumer of information have the skills to critically evaluate?

Criteria for Evaluating Health Info on Internet

- **Credibility=Authoritativeness + Trustworthiness**
 - **Authoritativeness**—position to know what is truthful
 - clearly identified authorship/sources/credentials
 - references for research studies (verify independently)
 - clearly identified editorial practices/review process
 - opportunities for feedback/interactivity (i.e email)
 - evidence of monitoring links

Criteria for Evaluating Health Info on Internet

- **Credibility=Authoritativeness + Trustworthiness**
- **Trustworthiness**—integrity of source/motivation to be truthful (even authoritative sources can be biased)
 - disclosure of mission/purpose; HONcode seal
 - disclosure of potential conflicts of interest (info w/in advertisements need to be labeled as such)
 - disclosure of collection, use, final destination of info
 - lack of “sounds too good to be true” claims
 - lack of conflict with commonly agreed upon info in medicine
 - accurate dates (last update, website created)
 - disclaimers—address limitations of a site

Credible Health Info Websites

- <https://medlineplus.gov>
- www.mayoclinic.org/patient-care-and-health-information
- <http://www.cdc.gov/>
- <https://familydoctor.org>
- www.webmd.com
- www.medscape.com
- <http://www.hopkinsmedicine.org/>

Evidence based medicine

| Strength | Level | Design | Randomization | Control |
|----------|---------|---|---------------|---------|
| High | Level 1 | Randomized control trial (RCT) | Yes | Yes |
| | | Meta-analysis of RCT with homogeneous results | No | |
| | Level 2 | Prospective comparative study (therapeutic) | No | Yes |
| | | Meta-analysis of Level 2 studies or Level 1 studies with inconsistent results | No | |
| | Level 3 | Retrospective Cohort Study | No | Yes |
| | | Case-control Study | No | Yes |
| | | Meta-analysis of Level 3 studies | No | |
| | Level 4 | Case Series | No | No |
| Low | Level 5 | Case Report | No | No |
| | | Expert Opinion | No | No |
| | | Personal Observation | No | No |

Much information on the internet functions at the lowest levels of evidence. The higher levels of evidence can be easily misunderstood by the lay public

Occupational & Speech Therapy

John Beenfield OT & Mandy Tingey SLP

OT 101- INTRO

- ▶ AT IT'S CORE, OCCUPATIONAL THERAPY IS CONCERNED WITH:
 - ▶ INDEPENDENCE
 - ▶ QUALITY OF LIFE!
- ▶ "OCCUPATION" IS ANY ACTIVITY PERFORMED BY AN INDIVIDUAL
 - ▶ SELF CARE TASKS: "ACTIVITIES OF DAILY LIVING" = ADL
 - ▶ PRODUCTIVITY: WORKING / SCHOOL
 - ▶ LEISURE: RECREATION / HOBBIES / SOCIALIZING
- ▶ PHILOSOPHY: USING **MEANINGFUL** 'OCCUPATIONS' FOR THERAPEUTIC OUTCOMES AND INCREASED QUALITY OF LIFE!
- ▶ HOLISTIC: TAKES INTO ACCOUNT NOT JUST THE PHYSICAL ASPECTS OF A PERSON, BUT ALSO THE SOCIAL, EMOTIONAL, AND COGNITIVE

LIVE LIFE TO THE
FULLEST
BECAUSE IT ONLY
HAPPENS ONCE

PICTURE QUOTES.COM

PICTUREQUOTES.COM

OT 101 CONT...

- ▶ PERSON, ENVIRONMENT, OCCUPATION, AND THE INTERACTION OF ALL 3
 - ▶ "WHAT IS THE PROBLEM WITH THE PROBLEM?"
 - ▶ IS IT THE PERSON, ENVIRONMENT, OR THE TASK ITSELF?
- ▶ OT SCHOOLING / EMPLOYMENT
 - ▶ REQUIRED: MASTERS DEGREE
 - ▶ IN 2014, APPROX. 115,000 EMPLOYED IN USA
 - ▶ OTA: OCCUPATIONAL THERAPY ASSISTANT
 - ▶ 2 YR ASSOCIATES DEGREE



PRACTICE AREAS

- ▶ ADULT SETTINGS
 - ▶ HOSPITALS / INPATIENT
 - ▶ OUTPATIENT CLINICS
 - ▶ HAND THERAPY, LYMPHEDEMA
 - ▶ HOME HEALTH
 - ▶ SNF / ASSISTED LIVING
 - ▶ COMMUNITY PROGRAMS
 - ▶ PRISONS, REFUGEES, ETC.
 - ▶ MENTAL INSTITUTIONS
 - ▶ SPECIALTY AREAS
- ▶ PEDIATRIC SETTINGS
 - ▶ SCHOOLS
 - ▶ OUTPATIENT CLINICS
 - ▶ EARLY INTERVENTION
 - ▶ SPECIALTY INSTITUTIONS



OCCUPATIONAL THERAPISTS WORK WITH:

- ▶ STROKE
- ▶ TRAUMATIC BRAIN INJURY
- ▶ SPINAL CORD INJURY
- ▶ MUSCULAR DYSTROPHY, CEREBRAL PALSY, ALS, PARKINSONS, MS, ETC.
- ▶ LOW VISION
- ▶ COGNITIVE DYSFUNCTION
- ▶ GERIATRICS / AGING
- ▶ WEAKNESS
- ▶ FINE MOTOR SKILLS
- ▶ SENSORY INTEGRATION ISSUES
- ▶ GROSS MOTOR SKILLS
- ▶ UPPER EXTREMITY DYSFUNCTION
- ▶ LYMPHEDEMA
- ▶ COMMUNITY MOBILITY
- ▶ BURNS
- ▶ AMPUTEES / PROSTHETICS
- ▶ CARDIAC / PULMONARY DISEASE
- ▶ ARTHRITIS
- ▶ SPLINTING / ORTHOTICS
- ▶ ETC.

OT ROLE

- ▶ OFTEN WORKS AS PART OF AN INTERDISCIPLINARY TEAM WITH
 - ▶ DOCTORS
 - ▶ NSG, IMAGING, RESPIRATORY
 - ▶ PHYSICAL THERAPISTS
 - ▶ SPEECH THERAPISTS
 - ▶ DIETITIANS
 - ▶ SOCIAL WORKERS
- ▶ INDEPENDENCE, ADLs
- ▶ ADAPTIVE EQUIPMENT



ADAPTIVE EQUIPMENT EXAMPLE:



- ▶ HIP REPLACEMENT
 - ▶ PRECAUTIONS: CAN'T BEND AT THE HIP = CAN'T GET DRESSED INDEPENDENTLY
- ▶ REACHER
- ▶ SOCK AID
- ▶ LONG-HANDLED SHOE HORN
- ▶ LONG-HANDLED SPONGE
- ▶ SIMPLE SOLUTIONS GO A LONG WAY!
- ▶ THERE ARE THOUSANDS OF A.E. OPTIONS

CASE STUDY

- ▶ CAROL IS A 62 Y.O. FEMALE THAT RECENTLY HAD A STROKE. CAROL LIVES WITH HER HUSBAND ROGER, WHO RECENTLY HAD KNEE SURGERY. PRIOR TO HER STROKE, CAROL WAS LIVING INDEPENDENTLY AT HOME AND ENJOYED GARDENING AND COUPONING. SHE CURRENTLY HAS MINIMAL USE OF HER RIGHT ARM, AND HAS FAIR USE OF HER RIGHT LEG. HER BALANCE IS POOR. AS A RESULT OF THE STROKE, CAROL HAS VISUAL AND PERCEPTUAL DEFICITS THAT MAKE IT DIFFICULT FOR HER TO SEE/INTERACT WITH OBJECTS IN HER RIGHT VISUAL FIELD. HER COGNITION IS UNCHANGED.

CASE STUDY CONTINUED...

- ▶ CAROL WAS REFERRED BY HER DOCTOR FOR PHYSICAL, SPEECH, AND OCCUPATIONAL THERAPY
- ▶ OCCUPATIONAL THERAPY TREATMENT GOALS:
 - ▶ NEUROREHABILITATION OF HER RIGHT ARM
 - ▶ EXERCISES, MODALITIES Ie: E-STIM, HOME EXERCISE PROGRAM
 - ▶ SPLINTING IF NEEDED
 - ▶ ASSESS/ADDRESS VISUAL LIMITATIONS
 - ▶ ADLs: HEMI DRESSING TECHNIQUES, TOILET TRANSFERS, BATHING AND GROOMING TECHNIQUES, ETC.
 - ▶ ADAPTIVE EQUIPMENT FOR SAFETY: Ie: SHOWER CHAIR
 - ▶ RIGHT ARM MANAGEMENT: INJURY PREVENTION: Ie: SLING, OTHER SUPPORTS
 - ▶ SKIN CARE - PREVENTION OF BREAKDOWN
 - ▶ TRANSFERS
 - ▶ HOME SAFETY EVAL: ACCESSIBILITY, LIGHTING, ORGANIZATION
 - ▶ SOCIAL SUPPORT SYSTEM: PHYSICAL, EMOTIONAL
 - ▶ DEPRESSION MANAGEMENT IF NEEDED
 - ▶ INCORPORATE DESIRED OCCUPATIONS: GARDENING, COUPONING

What Does a SLP Do?

- The Speech Language Pathologist provides evaluation, diagnosis, treatment, and preventative care for adult and pediatric conditions.
- The SLP will create individualized treatment plans to address articulation, language, swallowing, voice, fluency, and cognitive communication difficulties.

Definitions

- Articulation is the formation of clear and distinct sounds in speech.
- Language Development begins at birth and is how a child develops language.
- Receptive Language is the ability to understand information.
- Expressive Language is putting thoughts into words and formulating sentences.

Evaluation

- Speech Language Pathologists provided evaluation of communication disorder through standardized tests, speech and language samples, patient/caregiver reports, and clinical observation.
- The evaluation often contains several different methods.

Treatment

- Autism Spectrum Disorder
- Language Disorder
- Speech Apraxia
- Articulation Disorders
- Auditory Processing
- Cleft Palate
- Cerebral Palsy
- Feeding/Swallowing Difficulties
- Augmentative Alternative Communication Devices

Areas of Service

- Articulation
- Language Development
- Receptive Language
- Expressive Language
- Fluency
- Voice
- Dysphagia
- Neurologically Based Communication

Definitions

- Fluency is the ability to express oneself easily and articulately.
- Voice is the ability to control vocal quality and educate about good vocal hygiene.
- Dysphagia is the difficulty with swallowing.
- Neurologically Based Communication are difficulties caused by brain trauma or Neuropathies.

Treatment

- Treatment is always client/patient specific.
- Patient/caregiver education.
- Family is included and encouraged in the treatment process.

Services for Adults

- Individuals who have had a stroke, head injury, or neurological disorder that affects speech, language, cognition, motor coordination, strength, swallowing, and overall communication abilities.
- Cognitive and linguistic communication deficits such as memory, orientation, recalling information, and problem solving.

Counseling Service's Office: 847-4417

This is Your Brain on Adolescence

Bobbi Kelsey, MSW, LCSW

More likely to:

- × Act on Impulse
- × Misread or misinterpret social cue and emotions
- × Get into accidents of all kinds
- × Get involved in fights
- × Engage in dangerous and risky behavior

Less likely to:

- × Think before they act
- × Pause to consider the consequences of their actions
- × Change their dangerous or inappropriate behaviors
- × Hold back or control emotions

Adult vs Teen Brain

Prefrontal Cortex

- Weighs outcomes, forms judgments, controls impulses and emotions, helps people understand one another
- Restructures during teen years and is still developing well into the 20s.

Amygdala

- Responsible for immediate reactions including fear and aggression
- Connects sensory information to emotional responses

Nucleus Accumbens

- Area that seeks pleasure and reward
- Fairly well developed early on
- Doesn't register risk or delayed gratification

THE EFFECTS OF DRUGS ON THE TEEN BRAIN

- × Drugs overload the brain with dopamine- too many "feel good" signals
- × Brain struggles to balance and the body screams for more
- × The body needs more of the drug to get the same high

- × Dangers of drugs like heroin and cocaine
- × Drug use stops, dopamine drops, feel flat, down, not normal
- × Restoring itself takes time- days, weeks, or month
- × Teens are at risk due to over active pleasure seeking



[illegible]

- × Unusual smells on breath or clothes
- × Messy appearance
- × Poor hygiene
- × Red flushed face
- × Track Marks on arms or legs

- ×Disappearance of OTC or RX meds
- ×Missing alcohol or cigarettes
- ×Missing money
- ×Appearance of unusual containers or wrappers

- ×Focus completely on your child
- ×Keep an open mind
- ×Recognize when you don't have the energy to be a good listener

BLMH Counseling Services: 847-4464

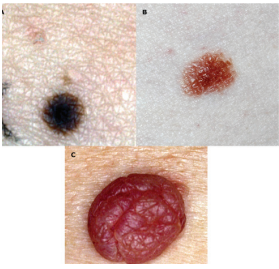
It's Only Skin Deep- Dr. Peter Crane

“ABCDE” rule

- **A**symmetry (if a lesion is bisected, one half is not identical to the other half)
- **B**order irregularities
- **C**olor variegation (brown, red, black or blue/gray, and white)
- **D**iameter ≥ 6 mm
- **E**volving: a lesion that is changing in size, shape, or color, or a new lesion

Dr. Crane's Office: 847-4495

Nevus (mole)



- Common nevi tend to be ≤ 6 mm in diameter and symmetric with a homogeneous surface, even pigmentation, round or oval shape, regular outline, and sharply demarcated border
- If you have a concern ask your physician, "When in doubt, punch it out"

Skin tags



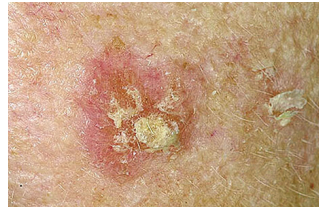
- Occur in approximately 50 percent of adults
- Treatment is indicated if lesions are irritating or the patient desires removal for cosmetic reasons.

Seborrheic keratosis



- Usually develop after the age of 50
- Typical "stuck-on" appearance
- Benign proliferation of immature keratinocytes
- Because seborrheic keratoses are benign and slow-growing lesions, treatment is generally not required. However, lesions that are symptomatic or that cause cosmetic concerns can be removed.

Actinic keratosis



- AKs often present as red and scaly lesions, most commonly detected in adults with fair skin.
- Chronic sun exposure is a major risk factor for the development of these lesions, which accounts for the usual detection of AKs in frequently sun-exposed areas

Epidermoid cyst



- Epidermoid cysts, also called epidermal cysts, epidermal inclusion cysts, or, improperly, "sebaceous cysts," are the most common cutaneous cysts.
- Can occur anywhere on the body
- Excision is best accomplished when the lesion is not inflamed

Cherry Hemangioma



- Mature capillary proliferations that are common in middle-aged and older adult patients
- Treatment of cherry angiomas is only necessary for patients who are bothered by the lesions.
- New lesions are likely to develop and there is no known way to

Solar lentigo



- "Age spots"
- Occurs in fair skinned people with a history of chronic sun exposure
- No treatment is needed unless the patient desires removal for cosmetic reasons.
- Liquid nitrogen can be used if treatment is desired.

lipoma



- Mature fat cells enclosed by thin fibrous capsules
- Soft, painless subcutaneous nodules ranging in size from 1 to >10 cm.
- Recurrence of an excised lipoma is not common.

Squamous Cell Carcinoma



- A common cutaneous malignancy that can occur on any surface of the skin
- More common in sun exposed skin on fair skinned individuals
- Skin biopsies are required to confirm the diagnosis.

Basal cell carcinoma



- Locally invasive, aggressive, and destructive of skin and the surrounding structures including bone
- BCC is particularly common in Caucasians; it is very uncommon in darker-skinned populations
- Sun exposure is the most important environmental cause of BCC

melanoma



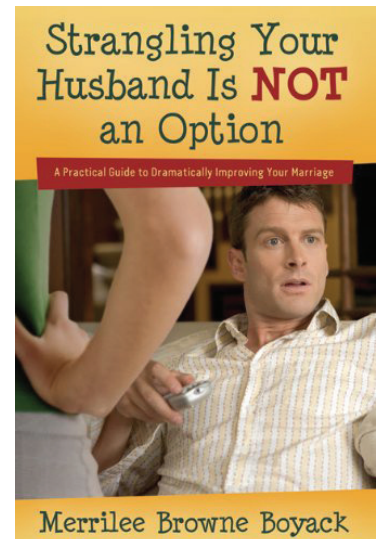
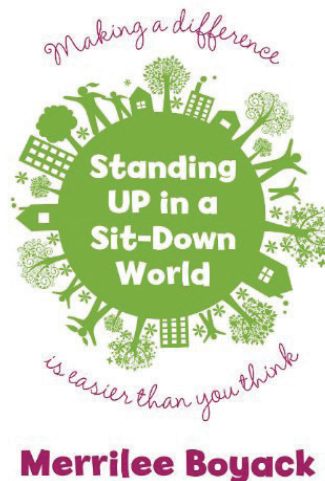
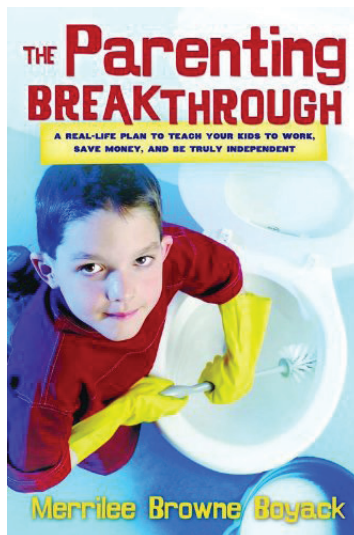
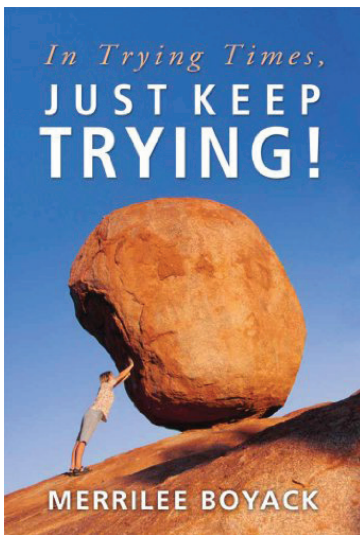
- Melanoma is the most serious form of skin cancer and the sixth most common cancer in North America
- Risk factors: family history, high number of common nevi, one or more atypical nevi, fair skin, excessive sun exposure, and history of sunburns.



Merrilee Boyack

Merrilee Boyack loves life & loves every season of life--especially this one! She enjoys hanging out with her hubby, four sons, daughter-in-law & two grandchildren & discussing politics. She is an estate-planning attorney & her law practice covers Utah and California. Merrilee is also a professional lecturer & speaks all over the country, featured for many years at BYU Education Week & Time Out for Women, & a published author. She loves to travel & meet people all over the world. Her perfect day is camping in a tent, reading a good book, taking a perfect hike, & eating FREE food.

She is the author of several books & talks, including *The Parenting Breakthrough*, *Strangling Your Husband Is Not an Option*; *In Trying Times, Just Keep Trying*. & her most recent, "Will My Child Be Ready: Missionary Prep for Moms" & "When I am a Missionary". Merrilee & her husband, Steve, reside in Lehi, Utah.



MerrileeBoyack.com