ENS INSIGHTS—Winter 2020

www.endo-nurses.org endocrinenurses@gmail.com

30th

ENS ANNUAL SYMPOSIUM 2020: San Francisco

Topics to Include:

Thyroid—Function & Dysfunction

Diabetes Update

Obesity & Bariatric Surgery

Conducting Clinical Trials

Vitamin D Deficiency

Growth Hormone Deficiency

Hypophosphatemia

...And more

THEN JOIN US

Annual ENS business meeting, Posters

Reception & Celebration

Register: https://www.endo-nurses.org/Upcoming-Events

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IN THE NEWS

FDA APPROVES UVA-DEVELOPED ARTIFICIAL PANCREAS

https://news.virginia.edu/content/fda-approves-uva-developed-artificial-pancreas

ENDOCRINE DISRUPTORS: EVIDENCE STILL DAMNING

https://www.medpagetoday.com/publichealthpolicy/environmentalhealth/84125

DRUG RECALL IN US CAUSES HYPOPARATHYROID PATIENTS EXTREME HARDSHIP

https://www.medscape.com/viewarticle/921971

ADA 2020 STANDARDS OF CARE INCORPORATE CVD RISK STRATIFICATION, NEW MEDICATIONS

https://www.endocrinologyadvisor.com/home/topics/diabetes/american-diabetes-association-updates-standards-of-medical-care-in-diabetes/

FOR THE 17TH YEAR IN A ROW, NURSES TOP GALLUP'S POLL OF MOST TRUSTED PROFESSION

https://www.aha.org/news/insights-and-analysis/2019-01-09-17th-year-row-nurses-top-gallups-poll-most-trusted-profession

Upcoming Elections

The Endocrine Nurses Society is looking for a Secretary, Member at large, & President Elect! Any member in good standing may be nominated. Self-nomination is accepted and encouraged. Deadline for nomination is Feb 1st 2020. Ballots will be e-mailed to members in the beginning of February and results will be announced immediately prior to the 30th Annual symposium March 28th in San Francisco.

If elected you will be expected to attend the ENS Annual Symposium, a fall board meeting (in person), and monthly online meetings.

There is no compensation but travel and Symposium expenses will be covered.

To nominate yourself or another qualified member: endocrinenurses@gmail.com

Endocrine Nursing Textbook Now Available for Order

This textbook is an international collaboration by endocrine nurses from around the world. Many of our ENS members contributed.

Advanced Practice in Endocrinology Nursing

Amazon.com

https://www.springer.com/us/book/9783319998152

2020 Awards and Grants

ENS Research Award ($1,000)

- To support development of a clinical project or independent research study to address needs of endocrine patients
- Recipients will be expected to present a poster outlining their work at ENS symposium in 2020
- Duration of grant is one year but grantees can apply for an extension for the 2nd year

Application deadline is **February 1, 2020**

Poster Award (up to $500)

- Members are encouraged to submit abstracts for poster display at the Endocrine Society's Annual meeting.
- Submit to ENS. If you submit to ENS you will be eligible for a poster award.

Submit to endocrinenurses@gmail.com

Find more information on our website.

Deadline: February 1, 2020 (ENS)

Betsy Love McClung Award ($1500)

In memorandum of a founding member, this award is for a nurse with similar achievements to Betsy, who has made an outstanding contribution to endocrine nursing through education, research, publications, quality of patient care.

Application deadline is **February 1, 2020**

Application: https://www.endo-nurses.org/resources/Documents/Betsy%20Love%20McClung%20Award%20Application.pdf

Submit to: endocrinenurses@gmail.com

ENS BOARD 2019-2020

PRESIDENT:	Christine Yedinak DNP FNP-BC MN RN, Oregon	PAST PRESIDENT:	Joan Damon-Simon MBA RN, Texas
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PROGRAM:	Michele Mims RN, Tennessee	MEMBER-AT-LARGE:	Raven McGlotten MSN RN, Maryland
RESEARCH:	Andrew Dwyer PhD FNP-BC, Massachusetts	MEMBERSHIP:	Gala Woitte RN, South Dakota
DEVELOPMENT:	Daphne Adelman MBA, BSN, Illinois	EDUCATION:	Kathryn Evans Kreider DNP FNP-BC BC-ADM, North Carolina
			Alicia Fields DNP FNP-C RYT, Indiana

What topics for continuing education would you like to see on the ENS website?

Scan the QR Code or complete the survey at the link below!

https://www.surveymonkey.com/r/8679BTP

From the President...

We are excited to welcome 2 new junior members to our team: Robert and Samuel, twin boys born to our Education Chair Kathryn Evans Kreider & her husband. Congratulations to the new ENS family! Alicia Fields has stepped in as Interim Education Chair whilst Kathryn is learning about motherhood.

Welcome also to the new adult members of our society. We continue to grow as a professional society and look forward to meeting everyone at our next great event on March 28th at our 30th symposium in San Francisco. We promise an event you won't forget. If you haven't registered please do so via our website or ENDO2020. There is a special discount for nurses to attend the ENS symposium. Breakfast, lunch and post symposium reception fun included. Don't miss it. Bring a friend and don't forget to invite your co-workers to our reception. Details at www.endo-nurses.org

If you haven't had a chance to purchase the new text: Advanced Practice in Endocrinology Nursing the come try your luck at winning a copy at the Symposium March 28th. If you are still interested in submitting a poster and qualify for our poster award, see how to submit or ask for assistance on our website.

Our regional symposium at Houston Methodist October 2019 was a blast. Space and earth endocrinology met successfully and new friendships were forged. This symposium will return. Watch our newsletters.

ENS website is still blooming. Comments are very welcome and help is always appreciated.

Our board members have been involved in several projects this quarter including a CDC supported project to inform diabetic patients about the advantages of inoculations and an alliance to advocate for patients with thyroid eye disease. All volunteers are welcome to be involved in any ongoing project. We also encourage your ideas about new projects.

As always, let us know your needs and priorities and how we can help you develop in your professional role. If you would like to participate as a speaker and as board or committee members, we want to talk with you. Don't forget to review our website: www.endo-nurses.org

Sincerely

Chris Yedinak

If you're interested...

NURSING, GENOMICS AND HEALTHCARE

27 - 29 April 2020
Wellcome Genome Campus, UK

Integrating Genomics into Nursing Practice and Education

The conference will bring together nurses and educators interested in mainstreaming genomics in the areas of education, practice, policy, research and leadership. The format will include presentations from international leaders, panel discussions and debates. Abstracts on all areas of the conference are welcome for poster or oral presentations.

KEY TOPICS

- Driving and measuring change
- Genomic implementation
- Exemplars in genomic practice integration
- Genomic education
- Leadership and collaboration: growing genomic nursing integration from scratch
- Policy and regulation
- Public, patient, and family expectations of genomics and the healthcare workforce
- Action plan for establishing a collaborative genomic nursing competency

KEYNOTE SPEAKER

- Sue Hill, NHS England

DEADLINES

- Abstracts (oral presentations): 10 December
- Early bird: 04 February 2020
- Bursary: 18 February 2020
- Abstract (poster presentations): 03 March 2020
- Registration: 31 March 2020

SCIENTIFIC PROGRAMME COMMITTEE

- Kathleen Calzone - National Cancer Institute, USA
- Sek Ying Chair - The Nethersole School of Nursing, Hong Kong, China
- Emma Tonkin - University of South Wales, UK
- Erika Maria Santos - Hospital Sírio-Libanês, Brazil
- Memnun Seven - University of Massachusetts Amherst, USA

CONFIRMED SPEAKERS

- Laurie Badzek – Penn State University, USA
- Lisa Baliss-Pratt – Health Education England, UK
- Patricia Brennan – Samuel Merritt University, USA
- Kathleen Calzone – National Cancer Institute, USA
- Sek Ying Chair – The Chinese University of Hong Kong, China
- Martina Cornel – Dutch National Patient Alliance for Rare & Genetic Diseases, The Netherlands
- Candace Henley – Blue Hat Foundation, USA
- Leigh Jackson – Exeter University, UK
- Annette Kennedy – International Council of Nursing, Ireland
- Jane Maguire – University of Technology Sydney, Australia
- Vicky Nembaware – African Genomic Medicine Training Initiative, South Africa
- Janice Sigsworth – Imperial College Healthcare, UK
- Emma Tonkin – University of South Wales, UK

More info and register:
bit.ly/GenomicsInNursing2020_P

#GenomicsinNursing2020
@ACSCevents

WELLCOME GENOME CAMPUS
CONNECTING SCIENCE
ADVANCED COURSES+ SCIENTIFIC CONFERENCES

Featured New Member : Elizabeth Maatta, RN

My name is Elizabeth and I am currently a float pool nurse in Minneapolis, MN. I work in areas such as oncology, cardiology, medical, surgical, intermediate care, ortho and neuro. However, my passion is treating those with endocrine disorders such as diabetes, adrenal disorders and PCOS with a holistic focus of management. I am currently in an online doctorate program at Johns Hopkins University for my Adult Health Clinical Nurse Specialist degree. When I graduate I plan to work treating those with endocrine disorders, especially in low income areas with limited resources and lower levels of education. I hope to see patients to help manage endocrine illnesses but also improve access to care while improving practice with evidence based research. I love to teach about diet, exercise, stress and overall lifestyle management to improve the effects of chronic diseases.

Welcome Elizabeth!

From the Research Chair

Dear Colleagues,

As the new Research Chair, I am looking forward to seeing you at the 30th annual meeting of the Endocrine Nurses Society in San Francisco, March 28th 2020. This is a wonderful time to reflect on the numerous contributions our organization has made to endocrine nursing care and to share your work. We strongly encourage members to submit an abstract for a poster presentation at the annual meeting. Posters may present research, quality improvement projects or cases studies on any endocrine-related topic. A "best poster" winner will receive a $500 prize!

First time? Contact the research chair (andrew.dwyer@bc.edu) to get support and guidance in preparing an abstract and tips for making an effective poster. Further, we will also provide a template to help you in putting your poster together.

Concerned about funding? Consider applying for a $500 travel grant https://www.endonurses.org/resources/Documents/TRAVEL%20GRANT%20Application.pdf

Abstract format
Submissions should include: abstract title, authors & their institutional affiliations, text body (400 words maximum) per the following structure:

- **Research**: Introduction, Methods, Results, Conclusions
- **Quality Improvement**: Population & Problem, Setting, Process & Implementation (methods), Outcomes (measures), Lessons Learned/Impact
- **Case Study**: Patient Demographics, Clinical Presentation, Relevant Past History (may include relevant family history), Evaluation (studies/assessment), Interventions (physiologic or psychosocial), Discussion/Recommendations

Have an idea for a research or quality improvement project? Consider applying for a 2-year $1,000 research grant. Awardees are invited to present their findings at a future ENS meeting. For details please contact the Research Chair (andrew.dwyer@bc.edu)

I look forward to seeing you in San Francisco!

Regards,

Andrew A. Dwyer, PhD, FNP-BC, FNAP
Assistant Professor, Boston College
ENS Research Chair

MODY2: A Family History

Katharine Mitchell, MSN, FNP-BC

In 2006, at the age of 5 years old, our daughter was diagnosed with type 1 diabetes for random blood sugar >200 mg/dl and started on a basal dose of Lantus 3 units nightly. Insulin had no effect on her fasting blood glucose numbers despite gradual increase in dose to 20+ units. Fasting blood sugars were typically 120 mg/dl and occasional post prandial close to 200 mg/dl. Surprisingly at times, I would notice a fasting blood sugar as low as 90 to 110 mg/dl that seems to persist <150 mg/dl consistently throughout the next 24-hour period. The only change I observed prior to these numbers were an extremely active day involving a soccer game or a hike with the family. So, for just over a year and a half she remained in a "honeymoon phase" with a1c <6.5 mg/dl before we discovered what was really happening.

In late 2007, I was diagnosed with type 2 diabetes with H1ac of 6.8%. Collectively, my recent diagnosis along with an atypical response our daughter had to insulin treatment made our pediatric endocrinologist become suspicious of Maturity-onset diabetes of the young (MODY). Athena Laboratories completed genetic testing on our daughter, confirming Glucokinase Maturity-Onset Diabetes of the Young (GCK-MODY) also known as MODY, version 2. Searching for answers, I discover the work of Dr. Hattersley and Dr. Shepherd on MODY in the UK at Essex University. After reviewing genetic testing conducted on my daughter and consulting Dr. Hattersley, Dr. Shepherd advised stopping all insulin.

Glucokinase maturity-onset diabetes of the young (GCK-MODY) is believed to affect at least 1 in 1,000 people around the world, regardless of ethnicity (Hattersley et. al., 2015). GCK-MODY is one of two most common versions of MODY out of now 13 definable versions. Briefly, the glucokinase (GCK) gene mutation passes down through families with an autosomal dominance hereditary; each family member has a 50/50 chance of inheriting the mutation (Hattersley et. al., 2015). In general, regardless of variation or severity in mutation, GCK-MODY carriers have a similar clinical phenotype, though this varies slightly between families and even individual family members (Hattersley et. al., 2015). Insulin sensitivity and first-phase insulin response is maintained however glucose homeostasis is sustained at a higher set point than considered "normal" causing the delayed release of GCK enzyme resulting in mild "asymptomatic" hyperglycemia beginning at birth with average HbA_{1c} between 5.8–7.6% and modest increase with age (Hattersley et. al., 2015). The delayed release of GCK in turns results in reduced glucose storage in the liver from glucose in the bloodstream after consuming carbohydrates causing quicker depletion of glucose available for immediate use by the body/brain; thus, requiring increased glucose production from non-carbohydrate sources from inside the body more quickly than usual in fasting state (Hattersley et. al., 2015).

Continued...

Typical persons with GCK-MODY are thought to have BMI <25; however, since their hyperglycemia is not related to BMI, those inheriting the mutation may have BMI >25. Stable, mild elevated fasting plasma glucose and/or HbA_{1c} above or below 5.8–7.6%, absence of autoantibodies, normal C-peptide, and a multigenerational family history are strong characteristics of GCK-MODY (Hattersley et. al., 2015). Treatment of GCK-MODY is not indicated as medication does not appear to reset homeostatic mechanisms; therefore, when exogenous insulin is given, endogenous insulin secretion is reduced, and mild hyperglycemia is not altered (Hattersley et. al., 2015). In fact, even diet has little effect on alternating these mechanisms. Further, microvascular or macrovascular complications greater than general population were not identified in study involving persons with GCK-MODY of an average age of 49 years old (Hattersley et. al., 2015; Steele et. al., 2014; Szopa et. al., 2015).

Labeling GCK-MODY asymptomatic may point out bias of researchers as I personally did not find this to be true. Like myself, I noticed both our kids confirmed with GCK-MODY struggled with similar symptoms. As blood sugars rises postprandial with delay of release of insulin, those in my family have experienced symptoms of poor concentration and other symptoms typical of hyperglycemia. These symptoms seem even more pronounced during puberty with possibility of coincidence insulin resistance, which is not usual even with general population.

GCK-MODY in an interesting subset of diabetes. For a short time after consuming carbohydrates the body has no insulin response like a person with type 1 diabetes. The implications for clinical practice based on research presented indicate one must revisit diagnosis of persons with diabetes if over time presentation is atypical, specifically with persistent mild hyperglycemia and/or HbA_{1c} above or below 5.8–7.6%, despite any change in diet, oral medication or insulin as well as absence of autoantibodies, a normal C-peptide, and a multigenerational family history, regardless of BMI (Hattersley et. al., 2015). In fact, mutigenerational family history is so strong that authors suggest checking a HbA_{1c} and/or fasting glucose in both parents if possible, for all children or adolescence suspect of GCK-MODY (Hattersley et. al., 2015). Regardless, a diagnosis of GCK-MODY must be confirmed via genetic testing. Obstacles of genetic testing include poor recognition of MODY by a provider and the cost.

References

Chakera, A. J., Steele, A. M., Gloyn, A. L., Shepherd, M. H., Shields, B., Ellard, S., & Hattersley, A. T. (2015). Recognition and Management of Individuals with Hyperglycemia Because of a Heterozygous Glucokinase Mutation. *Diabetes Care, 38*(7), 1383-1392. doi:10.2337/dc14-2769

Jw, K., Kc, C., Rg, G., Mw, H., Ll, L., B, L., . . . Today, S. G. (2018). Monogenic Diabetes in Overweight and Obese Youth Diagnosed with Type 2 Diabetes: The TODAY Clinical Trial. *Yearbook of Paediatric Endocrinology*. doi:10.1530/ey.15.12.6

Triglycerides

E. J. Milas, DNP, FNP

Triglycerides…Are they a cardiovascular risk factor? Regardless, triglycerides (TGs) are always a marker of some sort of metabolic dysfunction. Are they elevated because of an underlying thyroid disorder, insulin resistance, uncontrolled diabetes, or a primary lipid disorder? Many providers over the years have disregarded elevated TGs because they were not viewed as a cardiovascular risk factor based on the evidence. Two major trials with TG lowering agents, the AIM-High study with niacin and the ACCORD-Lipid Trial with fenofibrate showed no benefit to those agents[1, 2]. The AIM-High trial was stopped after an average 3-year follow-up for lack of efficacy and the ACCORD-Lipid did not show a benefit with fenofibrate. The AIM-High trial had a median TG of 167 and the ACCORD-Lipid trial had a medium TG of 162. Levels of TGs in these trials, however, were not what was defined at the time as hypertriglyceridemia. Among the sub-set of patients in both trials with a TG level over 200 mg/dl there was a reduction in events, but those were only a small sub-set of the total population of the trials. One should assume if you are going to use TG lowering agents in an outcome study, recruiting a significant number of patients with Hypertriglyceridemia would be in order. However, that was not the case with those studies. AIM-HIGH focused more on the hypothesis of increasing HDL to lower events and ACCORD-Lipid focused more on the diabetic patient.

Recently, the REDUCE-IT trial, with icosapent-ethyl (the EPA portion of omega-3 fatty acids) did show a reduction in CV events as well as CV mortality[3]. The median TG in the REDUCE-IT trial was 216. However, unlike the previous studies with TG agents, there was a statistically significant reduction in events with TGs as low as 150. TGs were a risk factor, but with event reduction with TGs as low as 150, this may suggest the molecule itself is the primary driver in reducing events rather than the effect on TGs. Nevertheless, elevated TGs are always an indicator of some sort of metabolic disorder that needs to be addressed and not ignored.

References

1. Bhatt, D., et al. Cardiovascular Risk Reduction with Icosapent Ethyl for Hypertriglyceridemia. N Engl J Med 2019; 380:11-22
2. Ginsberg, et al. Effects of Combination Lipid Therapy in Type 2 Diabetes Mellitus.
N Engl J Med 2010; 362:1563-1574
3. Boden, B. et al. Niacin in Patients with Low HDL Cholesterol Levels Receiving Intensive Statin Therapy. N Engl J Med 2011; 365:2255-2267