



Spring is coming...you can smell it in the air! As we complete one full year of life with COVID-19, all of us are looking forward to a fresh start with the new season. Of course, this is not the time to let our guard down, but with the increasing numbers of people who are fully vaccinated, we certainly have reason to hope that life may become more “normal” soon.

Many annual research meetings are still being held virtually. Because the Ascension travel restrictions are still in effect, GME Research is not able to fund travel to meetings at this time. Hopefully, this will change soon. In the meantime, funds usually spent for travel can be used to offset publication fees for manuscripts accepted into PubMed-indexed journals. For more information, please contact me.

Once again, our annual Resident Research Day will be held in an alternative format. PowerPoint presentations (with voice-over) and abstracts will be sent to our esteemed judges on 4/21 and they will have a week to review and score the entries. Winners will be announced on 4/28. We plan to have the winners present their studies live, via Zoom, on May 5th from 4-6 p.m. More information to come!

As we recall our crazy lives from March of 2020, let's hope the only “madness” of 2021 is the NCAA's March Madness! Best wishes to our local teams in the tournament (i.e. Go Blue)!

Dr. Susanna Szpunar

Director, Biomedical Investigations and Research

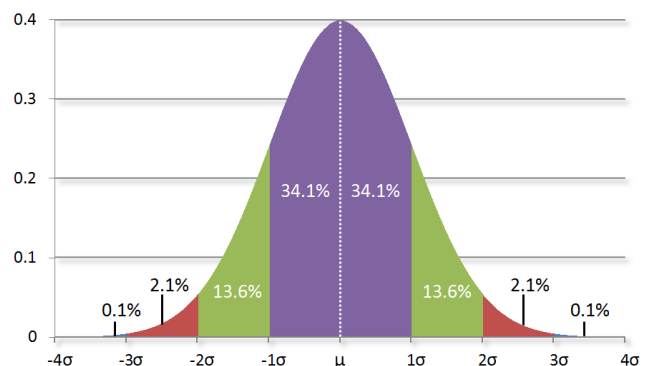


Fast Stats

Its great to be normal!

The normal distribution occupies the central position in statistical theory and methods. So, what's so special about the normal distribution?

1. The term “normal” does not mean “usual”, “standard” or “most common”. No observable random variable follows the normal distribution exactly and many variables occurring in normal experience do not tend to follow the normal distribution.
2. The dominance and usefulness of the distribution lie in its convenient mathematical properties, leading directly to much of the theory of statistics available for practice, its availability as an approximation to other distributions and its application to many random variables that are either approximately normally distributed or can be easily transformed to approximate normal variables.
3. The curve is bell-shaped and has a single peak or mode at $x=\mu$ (the mean). The area under the curve is 1. The points at which the direction of concavity change are called inflection points; these are located σ (the standard deviation) units above or below the mean.
4. The **Central Limit** theorem gives the normal distribution its critical importance. The theorem states that for random variables from any underlying distribution with mean μ and variance σ^2 , however non-normal it may be, the sampling distribution of the sample mean for random samples of size n , is approximately normal, and the approximation improves as n increases.



Congratulations to our Residents!

American College of Physicians Annual Scientific Michigan Chapter Meeting, October, 2020

Dr. Hiba Al Jammala, 2nd Place Poster – Clinical Vignette:
Cavitary Lesion in Legionella Pneumonia Serotype 1 in an Immunocompetent Host

Dr. Abdullah Nasser, 2nd Place Oral – Clinical Vignette:
COVID-19 Induced Focal Encephalitis



Great Lakes Michigan Podiatry Conference Resident Research Symposium, February, 2021

Dr. Jake Eisenschink, 2nd Place – Research Category:
Post-Operative Opioid Consumption Following Hallux Valgus and Rigidus Surgery: A Guide to Post-Operative Prescription Writing

Dr. James Renier, 2nd out of 36 – Clinical Vignette:
Multiple Schwannoma Involving the Posterior Tibial Nerve in a Patient With Neurofibromatosis With History of Meningioma

Dr. Reva Bork, 16th out of 36 – Clinical Vignette:
Bilateral Pre-Axial Polydactyly With Syndactyly of the Second and Third Digits in an 11-Month-Old Male

Recent Publications

- ◆ Affas S, Chaar A, Zamora-Sifuentes J, Turki N, Nasser A, Szpunar S, et al. Pre-Operative Predictors of Concurrent Choledocholithiasis in Patients With Acute Calculus Cholecystitis: An External Validity Analysis. *Cureus*. 2020;12(10):e11039.
- ◆ Anwar Ul Haq MM, Lyons H, Halim M. Pediatric Abdominal X-rays in the Acute Care Setting - Are We Overdiagnosing Constipation? *Cureus*. 2020;12(3):e7283.
- ◆ Bhargava A, Fukushima EA, Levine M, Zhao W, Tanveer F, Szpunar SM, et al. Predictors for Severe COVID-19 Infection. *Clin Infect Dis*. 2020;71(8):1962-8.
- ◆ Boshara A, Chandrashekar R, Davis T, Cohen GI. The TAVR that Got Away: A Case Report. *CASE (Phila)*. 2020;4(5):337-40.
- ◆ Boyce VJ, Natschke M. Establishing a Comprehensive Aromatherapy Program in Patient Care Settings. *Pain Manag Nurs*. 2019;20(6):532-40.
- ◆ Chauhan N, Khan HH, Kumar S, Lyons H. Clinical Variables as Predictors of First Relapse in Pediatric Crohn's Disease. *Cureus*. 2019;11(6):e4980.
- ◆ Cohen GI. A practical guide to graphic communication for quality assurance, education, and patient care in echocardiography. *Echocardiography*. 2019;36(9):1747-54.
- ◆ Irvin Babcock C, Paladino L. Advances in the methodology of co-ventilation during a disaster. *Thorax*. 2020;75(6):448.
- ◆ Johnson LB, Ramani A, Guervil DJ. Use of Ceftaroline Fosamil in Osteomyelitis: CAPTURE Study Experience. *BMC Infect Dis*. 2019;19(1):183.
- ◆ Kale-Pradhan PB, Giuliano C, Jongekrijg A, Rybak MJ. Combination of Vancomycin or Daptomycin and Beta-lactam Antibiotics: A Meta-analysis. *Pharmacotherapy*. 2020;40(7):648-58.
- ◆ Kanitra J, Power A, Hayward R, Haouilou J, Edhayan E. Malfunctioning Temporary Hemodialysis Catheters in Patients with COVID-19. *J Vasc Surg*. 2020 Dec 5; S0741-5214(20)32505-2.
- ◆ Sharma M, Braekevelt K, Kale-Pradhan P, Szpunar S, Khatib R. Are Blacks at Higher Risk for Vancomycin-Related Acute Kidney Injury? *J Pharm Pract*. 2020;33(5):592-7.



Institutional Review Board Update

Examples of projects that may not meet the definition of research (under 45CFR46 or 21CFR50)

Below are examples of projects that may not qualify as research. This list does not include all possible cases.

Quality Improvement/Quality Assurance Projects:

- Surveys whose primary purpose is to gauge the opinions and perceptions of internal and external “customers” (trainees, staff, patients, referring physicians, and others) are an integral component of organizational quality assessment and may be considered a quality improvement activity that does not require IRB review. Results of such surveys may yield new knowledge deserving of dissemination external to the organization through presentations and publications.
- QI/QA projects that are designed to improve clinical care to better conform to established/accepted standards are not considered research.

Example:

Clinical practice guidelines (CPGs) are intended to increase compliance with evidence-based or consensus-based practice. In general, CPGs and other QI projects that are designed to bring care in line with evidence or consensus-based standards will not require IRB approval.

Example:

Rapid cycle continuous quality improvement projects (“CQI”) almost always are designed to bring care within accepted standards and may yield publishable data if conducted over a sufficient period for results to be statistically valid, or if the interventions are especially novel and successful. Such CQI studies almost never should require IRB review. CQI activities are often required to meet accreditation and regulatory standards.

Example:

Questionnaires that are distributed to patient and service populations with the purpose of determining their satisfaction with a service, program or clinic and for gathering information on how to improve the service, program or clinic does not require IRB review.

SEMCME Update

43rd Annual Research Forum:

- ◆ **Wednesday, May 26th, 2021 (on-line)**
- ◆ Guest speaker: Arnold Monto, PhD (Acting Chair of the Vaccines and Related Biological Products Advisory Committee providing advice to the FDA)
- ◆ For more information visitwww.semcme.org or contact Ginger Keiffer at gkeiffer@med.wayne.edu

Sixth Annual Michigan Summit on Quality Improvement and Patient Safety:

- ◆ A voice over PowerPoint competition and,
- ◆ A livestream competition on **Wednesday, May 19th, 2021, 8:00 am – 12:30 pm** online via Zoom. Core faculty and fellows also are welcome to present their projects.
- ◆ For more information visit www.semcme.org or contact Nadia Juzych at njuzych@med.wayne.edu

Fifth Annual Pediatric Resident Research Forum:

- ◆ **Friday, May 7th, 2021, Noon – 4:00 pm**
- ◆ The Forum will feature consecutive slide presentations made by residents from the three participating hospitals and a panel of judges will determine the award winners.
- ◆ To sign up to attend the forum and be provided with a zoom meeting link prior to the program, please email Wendy Jolivet at wjolivet@med.wayne.edu.

CME Update

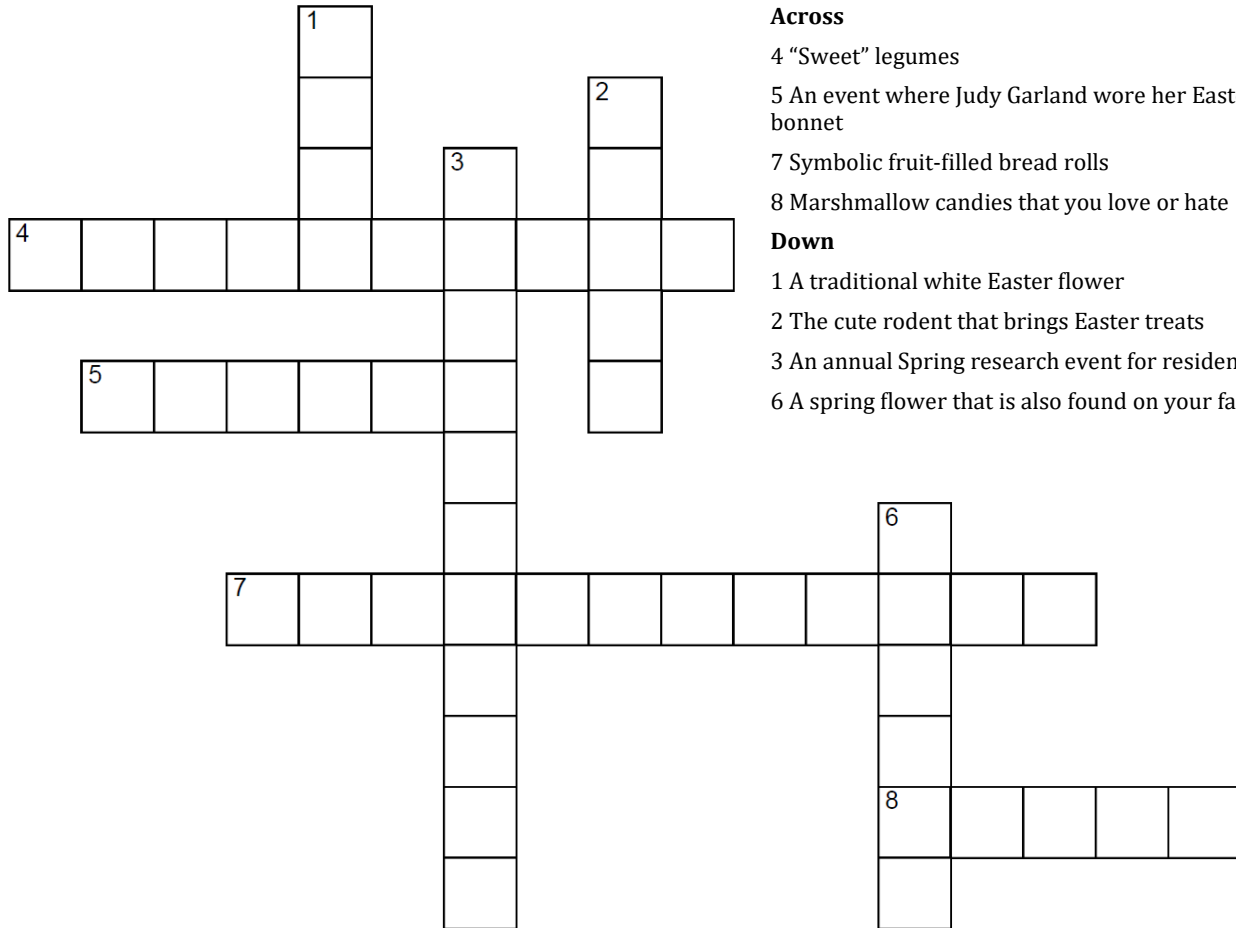
- ◆ **Radiology Symposium, May 20th, 2021**
- ◆ Contact Nancy DeRita for more information: Nancy.derita@ascension.org



Peeps were absent for Easter 2020 (they were in lockdown). But, they're baaaaack!



Easter Treats



The crossword puzzle grid consists of 10 rows and 10 columns. The clues are as follows:

- Across**
 - 4 "Sweet" legumes
 - 5 An event where Judy Garland wore her Easter bonnet
 - 7 Symbolic fruit-filled bread rolls
 - 8 Marshmallow candies that you love or hate
- Down**
 - 1 A traditional white Easter flower
 - 2 The cute rodent that brings Easter treats
 - 3 An annual Spring research event for residents
 - 6 A spring flower that is also found on your face

Research and IRB Staff

Susanna Szpunar, PhD	Director, Biomedical Inv. & Research	Susan.szpunar@ascension.org
Deborah LaBuda	Administrative Asst. II	Deborah.spampinato@ascension.org
Lee Bowen, MPA, CIP, CHRC	IRB Coordinator	Lee.booze-battle@ascension.org
Karen Hagglund, MS	Clinical Scholar	Karen.hagglund@ascension.org
Alice Mar, BA	Clinical Scholar	Alice.mar@ascension.org
Shelby Miller, MPH	Clinical Scholar	Shelby.miller@ascension.org
Kathleen Riederer, MT, ASCP	Research Scientist, ID Lab	Kathleen.riederer@ascension.org
Othuke Abada, MS	Clinical Scholar	Othuke.abada@ascension.org
Natalie Smith, BA	IRB Coordinator	Natalie.smith5@ascension.org
Grace Imel, BS	Research Assistant	Grace.imel@ascension.org