

Institutional Faculty Development Program XXIII

The Office of Faculty Development is pleased to give an update on the Institutional Faculty Development Program (IFDP) XXIII. The IFDP XXIII began in October 2024 and will end in June 2025.

The Institutional Faculty Development Program (IFDP) is a comprehensive course that extends over eight months. It is offered annually and accommodates faculty members from the Medicine, Hunt School of Foster School of Francis Graduate Nursing, School of Biomedical Sciences, Hunt School of Dental Medicine, and clinical faculty members of affiliated institutions and community faculty. The IFDP XXIII is designed to help junior and mid-level faculty members understand the full range of academic responsibilities, enhance their teaching and assessment skills, develop scholarship skills, understand the steps of academic advancement, establish and а network of colleagues.

The goal of the all-encompassing program is to enable faculty to improve their teaching and

evaluation abilities, remain proficient in their field of expertise, progress in their profession, find fulfillment in their work, conduct research and academic projects, cultivate leadership skills, and participate in public service related to their discipline. The IFDP XXIII is divided into four essential areas (Teaching, Research, Professionalism, and Leadership Development). The Office of Faculty Development strives to promote the growth of both the participants in the IFDP and the general faculty body of Texas Tech Health El Paso by providing weekly synchronous teleconferences and a few in-person sessions, complemented with online modules delivered via the Canvas learning management system (LMS).



Upcoming Workshops

Mentoring Early Career Faculty in Research

In this workshop, the learner will be able to establish a peer research mentoring program to enhance residents' scholarly output in ACGME-accredited programs. Implement a mentorship system pairing senior residents with interns to strengthen research skills and confidence. Collaborate with PARC to increase research productivity among medical students, residents, and fellows.

04/08 | noon - 1:00 p.m. | Webex

Developing Effective Leadership for Health Professionals

In this workshop, the learner will be able to develop a compelling vision and mission that inspires and aligns with their team or department. Establish SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound) to achieve strategic objectives.

04/15 | noon - 1:00 p.m. | MEB 1120

Interviewing Medical School Applicants: Tips for Faculty (What to expect?)

In this workshop, the learner will be able to apply effective interview techniques to assess candidates' leadership potential. Develop a structured evaluation framework for evaluating leadership capabilities. Analyze candidate strengths and areas for development using multiple assessment tools.

04/18 | noon - 1:00 p.m. | Webex

Optimizing Patient Care: Evidence-Based Guidelines for Healthcare Simulation

In this workshop, the learner will be able to explain the concept of simulation as it applies to healthcare education. Evaluate current research supporting effective simulation-based teaching methods. Demonstrate the role of simulation in enhancing both education and clinical practice.

04/25 | noon - 1:00 p.m. | Webex

Upcoming Workshops

Crafting Effective Simulation Experiences: Design and Implementation Strategies

In this workshop, the learner will be able to identify essential elements for creating immersive simulation scenarios. Evaluate simulation curricula and scenario designs, considering practical implementation factors. Apply best practices in simulation facilitation to optimize learning outcomes.

05/02 | noon - 1:00 p.m. | Webex

Empowering Student Success

In this workshop, the learner will be able to identify three effective teaching strategies that promote student success. Apply a selected strategy to enhance student success in classroom, clinical, or academic settings. Analyze the impact of educators, advisors, and other key figures on student success.

05/06 | noon - 1:00 p.m. | Webex

Quality Improvement using Program Evaluations and Other Sources

In this workshop, the learner will be able to develop ways the continuous quality improvement may be integrated into undergraduate medial education, Compare and contrast between process improvement methods and problem-solving methods.

05/09 | noon - 1:00 p.m. | Webex

Engaging the Healthcare Simulation Leaner in Psychological Safe Environment

In this workshop, the learner will be able to explain the concept and importance of psychological safety in simulation-based education-and demonstrate strategies for creating and maintaining a psychologically safe learning environment during simulations.

05/13 | noon - 1:00 p.m. | Webex

Upcoming Workshops

Achieving Excellence: Strategic Planning Essentials

In this workshop, the learner will be able to identify and analyze internal and external factors impacting the organization's strategic direction using frameworks like SWOT analysis. Utilize SMART goal-setting methodologies to translate the vision into specific, measurable, achievable, relevant, and time-bound objectives. Examine the various project lifecycle phases, including initiation, planning, execution, monitoring & control, and closure.

05/29 | noon - 1:00 p.m. | Webex



Coffee Hour Mentor, Mix, and a Morning Treat

Wed., April 23, 2025 7:30 - 8:30 am MSB II 1st Floor Lobby

Faculty, come and a grab a coffee or sweet treat, and join Dr. Mulla and the Office of Faculty Development (OFD) team on Wednesday, April 23, from 7:30 - 8:30 am for Community Coffee Hour. We will provide an overview of the Institutional Faculty Mentoring Program and how the Office of Faculty Development can assist.



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Congratulations on Faculty Promotions

The Office of Faculty Development congratulates the following faculty members that the Board of Regents approved changes in academic rank in their March 2025 meeting, effective Sept. 1, 2025. The faculty members participated in and graduated from the Institutional Faculty Development Program, Institutional Faculty Mentoring Program, and Leadership Development Academy Program.



Tenure Track Faculty

Congratulations to Shrikanth S. Gadad, Ph.D., M.Sc., on his successful promotion to associate professor, Department of Molecular and Translational Medicine, Paul L. Foster School of Medicine.



Congratulations to Ramadevi Subramani Reddy, Ph.D., on her successful promotion to associate professor, Department of Molecular and Translational Medicine, Paul L. Foster School of Medicine.



Kudos!





Non-Tenure Track Faculty

Congratulations to Daniel Bustamante, M.D., on his successful promotion to associate professor, Department of Pathology, Paul L. Foster School of Medicine.

Congratulations to Pallavi Dubey, Ph.D. on her successful promotion to research assistant professor, Department of Obstetrics and Gynecology, Paul L. Foster School of Medicine.



Congratulations to Sherif Elhanafi, M.D., on his successful promotion to associate professor, Department of Internal Medicine, Paul L. Foster School of Medicine. Dr. Elhanafi participated in the Leadership Development Academy III.



Congratulations to Christiane Herber-Valdez, Ed.D., on her successful promotion to associate professor, Department of Medical Education, Paul L. Foster School of Medicine.

Kudos!





Non-Tenure Track Faculty

Congratulations to Ei Khin, M.D., on her successful promotion to associate professor, Department of Pediatrics, Paul L. Foster School of Medicine. Congratulations to Sanjeet Panda, M.D., on his successful promotion to associate professor, Department of Pediatrics, Paul L. Foster School of Medicine.



Congratulations to Elizabeth Lee Rosenthal, Ph.D., on her successful promotion to associate professor, Department of Medical Education, Paul L. Foster School of Medicine.

Spotlight on Academic Excellence: Dr. Salma Elwazeer Receives Prestigious

Teaching Award



Congratulations to Salma Elwazeer, recipient of the teaching award.

Dr. Elwazeer is an assistant professor, public health/dental public health director, and interprofessional education director of public health education at Hunt School of Dental Medicine.

Dr. Elwazeer participated in the Institutional Faculty Development Program XX and the Leadership Development Academy III.

Dr. Elwazeer inspiring thoughts: Teaching is not just about transferring knowledge; it's about inspiring, empowering, and guiding students to become compassionate, lifelong learners. I believe education should extend beyond the classroom and clinic, fostering deep sense of social responsibility and a commitment to serving diverse communities.

Receiving this award is both humbling and deeply meaningful. It is more than a personal achievement; it reflects the mentorship that has shaped me over the years, the collaboration of supportive colleagues, and the students whose passion and dedication inspire me daily.

Inspirational Quote:

"The true measure of an educator is not in how much knowledge they impart, but in how deeply they inspire students to seek knowledge, think critically, and serve with compassion."

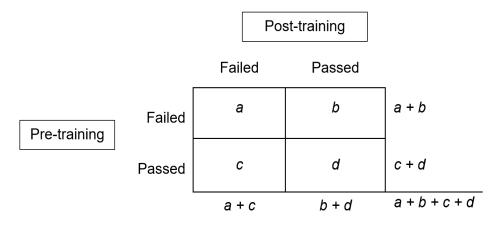
Faculty Tips Corner

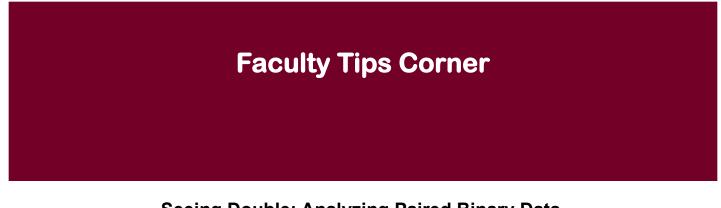
Seeing Double: Analyzing Paired Binary Data

Faculty members frequently encounter paired outcome data as they engage in scholarship in the clinical setting, laboratory, and/or classroom. For example, you may record the body mass index (BMI) of 20 patients immediately before you administer a dietary intervention, and then after several weeks, you measure the BMI in the same 20 patients after the intervention is completed. Assuming that you have a unique identifier for the 20 patients and hence can link the pre- and post-intervention BMI values, and given some other assumptions, you can perform a paired *t*-test to determine if the intervention affected BMI.¹ Please note that investigators should not perform a two-sample independent *t*-test in this situation because the samples are not independent.

Now, BMI is a continuous variable. What if you have two measurements of a binary (dichotomous) outcome variable for every subject or lab animal in your study? In other words, how can we statistically analyze paired categorical data that have two levels? One option is the McNemar test (also known as McNemar's test or the chi-square test for matched-paired data).^{2, 3}

Assume that an educator will assess a group of 16 learners in a clinical simulation center. The learners will be asked to perform a particular procedure. They will be graded by the educator on their performance. The possible outcome is passed or failed. Immediately after the initial assessment, the educator trains the learners on how to perform the procedure of interest, and then the same group of learners is assessed once again while in the clinical simulation center. Each learner receives a grade of passed or failed. The educator arranges the data as shown in Table 1 below. Table 1 is a 2 x 2 table (i.e., a table with two rows and two columns).





Seeing Double: Analyzing Paired Binary Data (Continued)

Table 1. Organizing matched-paired data.

Rows are horizontal entities, and columns are vertical entities. The intersection of a row and column is called a cell. The letters *b* and *c* in Table 1 represent the number of discordant pairs, that is, the number of pairs in which the learner passed the assessment before the training but failed the post-training assessment or the learner failed the pre-training assessment but passed the post-training assessment. The quantities a + c, b + d, a + b, and c + d represent marginal totals. The null hypothesis for the McNemar test is marginal homogeneity.⁴ In this hypothetical example, if the null hypothesis were true, then that would mean the training did not have an effect on the learner's performance.⁵ Note that McNemar's test does not use information on the number of concordant pairs (represented by *a* and *d* in Table 1).

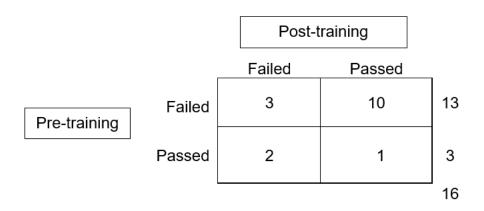


Table 2. Paired binary data from a fictitious study of the effect of training on performance in a group of 16 learners.

Ten of the 16 learners failed the pre-training assessment and passed the post-training assessment. One learner (represented by the *d* cell) passed both the pre- and post-training assessments. SAS 9.4 software was used to analyze this fictitious dataset. A McNemar test was performed using an alpha of 0.05. The *p*-value from McNemar's test was 0.02. Since 0.02 is less than or equal to 0.05, the null hypothesis is rejected. The educator concludes that the result is statistically significant.

Faculty Tips Corner

Seeing Double: Analyzing Paired Binary Data (Continued)

For small samples, consider using the exact McNemar test or the McNemar mid-*p* test.⁶ As with any statistical test or model, please consult an expert if you have questions. If you would like to learn more about analyzing datasets in which the assumption of statistical independence was violated because the outcome was measured two or more times in the same subject or experimental unit, please watch our video entitled "Longitudinal data analysis." If you have an eRaider credential, then please click on the following link to access this presentation which is housed in the Canvas learning management system: <u>https://ttuhscelpaso.instructure.com/courses/10715/pages/m2t3-objectives-longitudinal-data-analysis</u>. For individuals who do not have an eRaider: credential, please contact us at <u>EIPasoFacultyDevelopment@ttuhsc.edu</u> or 915-215-4380.

Cited references

- 1. Daniel WW. Biostatistics: A Foundation for Analysis in the Health Sciences Fifth Edition. John Wiley & Sons, Inc. New York, 19912.
- 2. *Encyclopedia of Biostatistics Second Edition*. Volume 5 (MAS-NUI). Armitage P, Colton T (Editors-in-Chief). John Wiley & Sons Ltd. England, 2005. Pages 3008, 3009, 3062, 3063.
- 3. Hennekens CH, Buring JE. Édited by: Mayrent SL. *Epidemiology in Medicine*. Little, Brown, and Company. Boston, 1987. Page 301.
- SAS Institute, Inc. SAS/STAT 14.2 User's Guide. The FREQ Procedure. McNemar's Test. Available at: <u>https://documentation.sas.com/doc/en/statcdc/14.2/statug/</u><u>statug_freq_details74.htm.</u> Accessed on March 24, 2025. Wikipedia. McNemar's test. Available at: <u>https://en.wikipedia.org/wiki/McNemar%27s_test.</u> Accessed on March 24, 2025.
- 5. Fagerland MW, Lydersen S, Laake P. The McNemar test for binary matched-pairs data: mid-p and asymptotic are better than exact conditional. *BMC Med Res Methodol* 2013 Jul 13:13:91. doi: 10.1186/1471-2288-13-91.

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ElPasoFacultyDevelopment@ttuhsc.edu

with the subject line Faculty Tips.

