

**Brief Communication: SMJS-MET Conference Sponsorship Program**



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**THE DIGITAL LABORATORY: WHEN THE KNOWLEDGE SPREADS EVERYWHERE**

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[*Note from the Editor-in-Chief:* SMJS-MET CSP (Saudi Medical Journal for Students Conference Sponsorship Program) provides student workshops and conference organizers a privileged platform for publishing proceedings. If you are interested in partnering with us, please get in touch with the Editorial office: [SMJS.editors@ut.edu.sa](mailto:SMJS.editors@ut.edu.sa)]

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**BACKGROUND**

Nowadays, knowledge surpasses the boundaries of textbooks as different types of learning have emerged. The advanced technology conveys the information in interactive materials such as three-dimensional pictures, videos, articles, and quizzes available anytime and anywhere for everyone. The Digital Laboratory Project was established upon these bases to enhance student's knowledge about the medical laboratories. To achieve this goal, a series of training workshops named Basic Laboratories Skills Workshop (BLSW) were held to teach students the basics in Histopathology, Physiology, and Biochemistry laboratories so far. The students were first trained for the basics of each laboratory and laboratory safety.

In an attempt to measure the project's true impact by the language of statistics, a pre and post-surveys were done. They were made by online google forms and addressed various aspects of the basic knowledge. The exact questions were repeated in the post-workshop survey without notifying students initially that the questions will be the same to avoid any intentioned recognition

and precisely measure the effect of workshops. The trainer taught all the answers of the questions during the work.

Before conducting the first Basic Laboratory Skills Workshop (BLSW1), the estimated average level of knowledge among participants was around 52%, whereas after finishing the workshop, the student's level was 67%. These numbers signify the effect of the training and encourage the project leader to continue training and spreading knowledge everywhere to matter how small it was.

### **Educational Objective of the Workshop**

- Train the student on the basic skills of the Histopathology laboratory
- Train the student on the basic skills of the Physiology laboratory
- Train the student on the basic skills of the Biochemistry laboratory
- Train the student on the basic safety and hazards of the laboratory
- Introduce the student to the personal protective equipment

### **Workshop organizers**

Areej Abdullah D Aljohani (Leader)

Yasser Hamed Alatawi

Raghad Mohmmmed E Alhawiti

Dana Mohsen Alqasmi

Amira Abudalmohsn S Alkonani

Mahmoud Alarki

Rammy Abdullah Asseiri

Amjad Bader Almutairi

Saif Mohammed Alamrani

Ghaida Bandar Alanazi

Mohammed Salem Alshehri

Waseem Mohammed Almalawi

Reema Abdulrahman A Alanazi

Esraa Yehea Hasan Ma'ashi

Shahad Saad A Aljoaid

Mohammed Akram Alanazi

Sarah Ali H Abusabir

Danah Ali H Abusabir

Ahmed Yasir M Alkhaldi

Raed Helal N Aljabri

Fahad Khalid Alenzi

Yahya Nasser Hakami

Abdullah Mohammed Alwakeel

Abeer Bader Alanazi

Razan Kamel Albalawi

Raghad Adnan Alghazzawi

Amirah Naif A Albalawi

Alshaymaa Alanazi

Bandr Mohammed F Alenazi

Lama Akram Alanazi

Yazeed Mohammed Alenazi

**Date and Time of Workshop:** Two workshops were conducted, BLSW on 26th Aug 2021, BLSW2 on 8<sup>th</sup> Sept 2021

**Description of session:** The trainers trained a group of 3-5 students. Firstly, a brief lecture about the safety in medical laboratory and the hazards were given. In the Histopathology lab, they were trained at using the light microscope. In physiology, participants were taught manual blood measuring, stethoscope use, and identifying blood group by slide method. Finally, the

biochemistry laboratory they had received a training session on micro pipetting technique and spectrophotometer use.

### FEEDBACK

A 20% rise in knowledge was recorded according to the post-workshop questionnaire. A post and pre-workshop online surveys were done. Google forms were used to create the survey; both had the same 10 MCQ questions to precisely measure the effect. After collecting the results, the total statistical average of all the correct answers was calculated in each survey and then subtracted to get the average knowledge raise.

### CONCLUSION

The workshops carried a significant benefit to the students' knowledge and assessed them in their study

### ACKNOWLEDGMENT

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