Sri Lakshmi Narayana Institute of Medical Sciences

Date: 02.05.2018

From
Dr.Abarna.V
Department of Microbiology,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

To
The Dean,
Sri Lakshmi Narayana Institute of Medical College
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course: WHONET basics in Microbiology Laboratory &Organizational behaviour

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled WHONET basics in Microbiology Laboratory from July2018 to Oct 2018 & Organizational behaviour from Oct 2018 to Dec 2018 for undergraduates on July 2018. We solicit your kind permission for the same.

Kind Regards

Dr.Abarna.V,

Department of Microbiology,

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: Dr.Sukumaran

The HOD: Dr.Abarna.V

The Expert: Mr.Naveenkumar.C

The committee has discussed about the course and is approved.

Dean
(Sign & Seal)
DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KOODAPAKKAM POST,
PUDUCHERRY - 605 502

Subject Expert
(Sign & Seal)
DEPT OF MICROBIOLOGY
SRI LAKSHMI NARAYANA INSTITUTE OF
MEDICAL SCIENCES-PONDICHERRY 605 502

HOD
(Sign & Seal)
DEPT OF MICROBIOLOGY
SRI LAKSHMI NARAYANA INSTITUTE OF
MEDICAL SCIENCES-PONDICHERRY 605 502

OFFICE OF THE DEAN

Sri Lakshmi Narayana Institute Of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,

PUDUCHERRY – 605 502

Circular

25.06.2018

Sub: Organising Value-added Course: WHONET basics in Microbiology Laboratory

reg

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, **Bharath Institute of Higher Education and Research** is organising "WHONET basics in Microbiology Laboratory". The course content **form** is enclosed below."

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before July 2nd 2018. Applications received after the mentioned date shall not be entertained under any circumstances.

Dean

DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KUDAPAKKAM POST,
PUDUCHERRY - 605 502

Encl: Copy of Course content .

Course Proposal

Course Title: WHONET basics in Microbiology Laboratory

Course Objective:

1. Introduce the students to different fields of research
2. To learn basic principles of genetics
3. To learn the basic skills involved in karyotyping

Course Outcome: WHONET basics in Microbiology Laboratory

Course Audience: Medical undergraduates

Course Coordinator: Dr. Abarna.V

Course Faculties with Qualification and Designation:

1.Dr.C.Naveenkumar, Msc; PhdAssistant Professor

2.Dr.Jayapradha.S , MD, Assistant Professor

Course Curriculum/Topics with schedule (Min of 34hours)

Sl no	Date	Topic	Time	Hour	Lecture taken by
1.	4.7.2018	Role of Microbiology Department	4-6p.m	2	Mr.Naveenkumar
2.	11.7.2018	What is WHONET	4-6p.m	2	Dr.Abarna.V
3.	18.7.2018	Uses of WHONET	4-6p.m	2	Mr.Naveenkumar
4.	25.7.2018	About WHONET Software 1	4-6p.m	2	Dr.Jayapradha.S
5.	1.8.2018	About WHONET Software 1	4-6p.m	2	Dr.Abarna.V
6.	8.8.2018	Practical hands on training session 1	4-6p.m	2	Mr.Naveenkumar
7.	22.8.2018	Documentation	4-6p.m	2	Mr.Naveenkumar
8.	29.8.2018	Why we should adopt to WHONET ?	4-6p.m	2	Mr.Naveenkumar
9.	5.9.2018	Practical hands on training session 1	4-6p.m	2	Dr.Abarna.V
10.	12.9.2018	Data analysis 1	4-6p.m	2	Dr.Jayapradha.S
11.	19.9.2018	Installing	4-6p.m	2	Dr.Abarna.V
12.	26.9.2018	Data analysis 2	4-6p.m	2	Dr.Jayapradha.S
13.	3.10.2018	Sections in WHONET	4-6p.m	2	Dr.Jayapradha.S
14.	10.10.2018	Conclusion and a practice session	4-6p.m	2	Mr.Naveenkumar
15.	17.10.2018	Practical hands on training session 2	4-6p.m	2	Dr.Abarna.V
16.	24.10.2018	Software installation	4-6p.m	2	Mr.Naveenkumar
17.	31.10.2018	Exercise in data analysis by students	4-6p.m	2	Dr.Jayapradha.S
			Total Hours	34	

- **Journal of clinical and diagnostic research- Reference article**

VALUE ADDED COURSE

1. Name of the programme & Code

WHONET basics in Microbiology Laboratory MIC07

2. Duration & Period

34hrs , Every July 2018– Oct 2018

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Multiple choice questions- *Enclosed as Annexure- III*

6. Course Feed Back

Enclosed as Annexure- IV

7. No. of times offered during the same year:

34 hrs Every July 2018– Oct 2018

8. Year of discontinuation: 2018

9. Summary report of each program year-wise

Value Added Course					
Sl. No	**Course Code**	**Course Name**	**Resource Persons**	**Target Students**	**Strength & Year**
1	MIC07	WHONET basics in Microbiology Laboratory	Dr. C .Naveen kumar Dr.Jayapradha.S	MBBS	25 July 2018– Oct 2018

10. Certificate model Course Feed Back

Enclosed as Annexure- V

RESOURCE PERSON **COORDINATOR**

WHONET basics in Microbiology Laboratory

PARTICIPANT HAND BOOK

ANNEXURE I

BIHER SLIMS

COURSE DETAILS

Particulars	Description
Course Title	**WHONET basics in Microbiology Laboratory**
Course Code	MIC07
Objective	1. Role of Microbiology Department 2. What is WHONET? 3. Uses of WHONET 4. About WHONET Software 5. Documentation 6. Why we should adopt to WHONET ? 7. Installing 8. Data analysis 9. Sections 10. Conclusion
Further learning opportunities	**WHONET basics in Microbiology Laboratory**
Key Competencies	On successful completion of the course the students will have skill in handling WHONET
Target Student	MBBS Students
Duration	30hrs Every July 2018– October 2018
Theory Session	20hrs
Practical Session	10hrs
Assessment Procedure	Questionnaire

Date	**Time**	**Topic**	**Resource person**
4.7.2018	4-6pm	Role of Microbiology Department	Mr.Naveenkumar
11.7.2018	4-6pm	What is WHONET	Dr.Abarna.V
18.7.2018	4-6pm	Uses of WHONET	Mr.Naveenkumar
25.7.2018	4-6pm	About WHONET Software 1	Dr.Jayapradha.S

1.8.2018	4-6pm	About WHONET Software 1	Dr.Abarna.V
8.8.2018	4-6pm	Practical hands on training session 1	Mr.Naveenkumar
22.8.2018	4-6pm	Documentation	Mr.Naveenkumar
29.8.2018	4-6pm	Why we should adopt to WHONET ?	Mr.Naveenkumar
5.9.2018	4-6pm	Practical hands on training session 1	Dr.Abarna.V
12.9.2018	4-6pm	Data analysis 1	Dr.Jayapradha.S
19.9.2018	4-6pm	Installing	Dr.Abarna.V
26.9.2018	4-6pm	Data analysis 2	Dr.Jayapradha.S
3.10.2018	4-6pm	Sections in WHONET	Dr.Jayapradha.S
10.10.2018	4-6pm	Conclusion and a practice session	Mr.Naveenkumar
17.10.2018	4-6pm	Practical hands on training session 2	Dr.Abarna.V
24.10.2018	4-6pm	Software installation	Mr.Naveenkumar
31.10.2018	4-6pm	Exercise in data analysis by students	Dr.Jayapradha.S

WHONET Basics

1. **Role of Microbiology Department**

   • Microbiology departments asses trends in development of antimicrobial resistance.

   • The results of sensitivity/resistance patterns should be correlated with Antimicrobial agents currently used in the Hospital.

   • Identify and forecast that nature of relation between antibiotic use and resistance.

2. **What is WHONET?**

• WHONET is an effective computerized microbiology laboratory data management and analysis program that can provide guidance for empiric therapy of infections, alert clinicians of trends of antimicrobial resistance, guide drug-policy decisions and preventive measures. It can handle bacteria, fungus and parasites

• At present, WHONET can handle results from the testing of bacteria, fungi, and parasites. WHONET does not yet have virological tests incorporated, but this is a priority area of programming in the upcoming year.

3. Uses of WHONET

- WHONET can be used by individual laboratories or as part of a national and international surveillance network. At present, the software, available in 17 languages, is used in over 90 countries around the world managing data from over 1000 clinical, public health, veterinary, and food laboratories
- WHONET is used to support surveillance activities in the countries indicated in Red. All can share Information The program facilitates sharing of data amongst different hospitals by putting each laboratory data into a common code and file format, which can be merged for national or global collaboration of antimicrobial resistance surveillance
- WHONET contains Complete Laboratory Information System Clinical reporting – return results to clinicians – permanent record Laboratory management system – preliminary and final results – guide technologists through needed laboratory tests – billing and financial accounting Data analysis

4. About WHONET Software

It is Multilingual . Languages available at present include: Bulgarian, Chinese (simplified), English, Estonian, French, German, Greek, Indonesian, Italian, Japanese, Norwegian (Bokmål and Nynorsk), Portuguese, Russian, Spanish and Thailand.

5. Documentation

WHONET is a Windows-based database software developed for the management of microbiology laboratory data and the analysis of antimicrobial susceptibility test results.

WHONET: is A Microbiology Data Management Tool • Enhance the use of locally-generated data – Antimicrobial policy, infection control – Laboratory quality assurance • Promote collaborations – National and International networks

6. Why we should adopt to WHONET ?

The WHONET program puts each laboratory's data into a common code and file format at that laboratory, either by serving as or by translating from its own computer reporting system. It then enables each medical center to analyze its files in ways that help it monitor and manage resistance locally and to merge them with files of other centers for collaborative national or global surveillance of resistance.

7. Components of WHONET ?

WHONET has three main components

• 1 Laboratory configuration

• WHONET permits the customization of the software for use in your institution. You can indicate which antimicrobials you test in the laboratory, patient care areas served, data fields that you want to include in the surveillance program, and microbiological alerts of unusual or important organisms and resistance phenotypes

8. **Installing WHONET**

• You must install WHONET onto your computer before you can begin using it. WHONET • is compatible with all versions of Microsoft Windows from Windows 95 to the most recent, Windows 7 • The installation process is fairly automatic and copies the program files into appropriate locations on your computer, creating menu links and icons which will permit easy access to

9. Analysis of Data

Antibiotic Resistance A Changing Phenomena • Susceptibility data obtained from clinical microbiology laboratory helps to formulate antibiotic policy of the hospital. The data is to be analyzed and compared periodically to monitor changes in resistance rates, detecting the emergence of new resistance traits and to measure the impact of any interventions All the Documented results are analyzed in WHONET • The heart of WHONET is a software package designed to collect the results of antibiotic

resistance tests. Researchers / Microbiologists feed the results into a computer and look for trend Growing importance of WHONET • World over antimicrobial resistance is a major public health problem. The WHONET software program puts each laboratory data into a common code and file format, which can be merged for national or global collaboration of antimicrobial resistance surveillan

Our Results Shared With ... • Further, this data can be shared between different centers at the regional, national and global levels to assess the magnitude of the Antibiotic resistance

WHONET is a windows based Database • WHONET is a windows based database software package for the management of microbiology laboratory data and the analysis of antimicrobial susceptibility test results. Current version WHO5.5 can be downloaded from the internet free of charge from URL (www.who.int/drugresistance/whonetsoftware). The software can be installed easily on a personal computers.

We Enter, Share, Modify • This program permits the user to enter and modify laboratory-specific information such as patient- care areas (OPDs or wards), selection of antibiotic panels and interpretive breakpoints for various antibiotics. In addition, one can also indicate what data fields one want included in the data files. This configuration can be modified subsequently. Attractive feature of WHONET • The most attractive feature of WHONET is the ability to analyze stored data. The program has a modular configuration that allows customization of software for clinical, epidemiological, and infection control applications. From a single screen, a WHONET user can select the type of analysis to run,

10. Sections of WHONET

The software consists of three sections.

1) Data Entry. In addition to the routine entry of susceptibility test results (disk diffusion, MIC, and/or E-test), this program permits printing, retrieval, and correction of clinical records as well as immediate feedback on test results.

Data Analysis • Data Analysis. Currently supported analyses include listings and summaries of isolates by user- defined criteria; tabulation of the percentages of resistant, intermediate, and susceptible isolates by species; zone diameter and MIC histograms; scatterplots of zone diameter versus zone diameter or MIC versus MIC;

From a single screen, a WHONET user can select the type of analysis to run. The Analysis Results screen Histograms can be created for Individual Microbe Scatterplot created for two different Antibiotic Amikacin vs. Gentamicin All antibiotic profiles at a click

Down load WHONET through Hyperlink below Click here to download the software and manuals

WHONET A Global networking Programme • WHONET is currently used in over 90 countries, managing data from over 1300 laboratories. – Hospital and public health laboratories – Food and veterinary laboratories – Reference and research laboratories • Data collections – Routine laboratory data – Special surveys and research protocols

Desktop software's Laboratory systems WHONET BacLink Excel Access EpiInfo Laboratory instruments Mysis MEDITECH ADBakt MIC systems Disk diffusion readers Data analysis Data conversion

BacLink can transfer data into WHONET from: • Common commercial database and spread sheet software; commercial susceptibility test instruments for MIC broth micro dilution and disk diffusion readers hospital and laboratory information systems through text files

Principal goals of the software are: • To enhance local use of laboratory data; and to promote national and international collaboration through the exchange of data.

Picks up Antibiograms and analyses • The heart of WHONET is a software package designed to collect the results of antibiotic resistance tests. Researchers feed the results into a computer and look for trends

Trouble shooting • If your computer is part of a hospital network and if you have difficulties installing • WHONET, a frequent explanation is that many computer system administrators disable the ability of typical computer users to install new software's. They do this to help • Protect the computers from viruses or other accidental modifications. In this situation, please ask your computer administrator to install the software for you. If you continue to have difficulties with installation, please write to John Stelling at jstelling@rics.bwh.harvard.edu for additional assistance.

Better services from Microbiology Departments. • Basic infrastructure should be updated for detection of MRSA and ESBL producers. • Documentation of all Opportunistic infections. and Hospital infection outbreak

WHONET Use in the World • African Regional Office of WHO (AFRO) – Algeria, Kenya, Namibia, South Africa, Tanzania, Zambia • Eastern Mediterranean Regional Office of WHO (EMRO) – Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Saudi Arabia, Tunisia • European Regional Office of WHO (EURO) – Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Iceland, Ireland, Israel, Italy, Latvia, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Ukraine, United Kingdom • Pan-American Health Organization (PAHO) – Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, United States, Uruguay, Venezuela • South-East Asian Regional Office of WHO (SEARO) – India, Indonesia, Sri Lanka, Thailand • Western Pacific Regional Office of WHO (WPRO) – China, Hong Kong (China), Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan, Viet Nam

Make your conclusions and contribute to Antibiotic Policy • It is true to say that there is no absolute proof of causative association between antibiotic use and resistance, But many authorities believe the association to be virtually certain. • It is pragmatic and essential approach to control of antibiotic resistance with control of antibiotic use. • Make every one a partner in prevention of Antibiotic resistance, and success will follow.

Computerized Decisions a Emerging Need ….. • Computerized decision support can preserve physician autonomy and has been shown to improve antibiotic use by a number of different measures: fewer susceptibility mismatches, allergic reactions and other adverse events, excess dosages, and overall amount and cost of antibiotic therapy

Implementation of WHONET can help to monitor resistance • Legacy computer systems, quality improvement teams, and strategies for optimizing antibiotic use have the potential to stabilize resistance and reduce costs by encouraging heterogeneous prescribing patterns and use of local susceptibility patterns to inform empiric treatment

World Antibiotic Resistance Network • WHO has also started another program, WARN (the World Antibiotic Resistance Network), to help gather and analyse the data generated by the people who use WHONET. WHO will launch a worldwide campaign to safeguard these medicines for future generations. Antimicrobial resistance - the theme of World Health Day 2011 –

Conclusion:

WHONET is an effective tool which help not only in routine microbiology laboratory data management but also generate valuable information about Antimicrobial susceptibility patterns over a place or time to provide the basis for and assess the effectiveness of prevention programs and policy decisions

Annexure- II

VALUE ADDED COURSE

WHONET basics in Microbiology Laboratory

MIC07

List of Students Enrolled July 2018 – Oct- 2018

MBBS Students			
Sl. No	Name of the Student	Roll No	Signature
1	ANNAPOORANI.L	U17MB251	
2	ANUSUYA.N	U17MB252	
3	APOORVA MALL	U17MB253	
4	ASHISH RANJAN	U17MB254	
5	ASWIN KUMAR.G	U17MB255	
6	ATHUL S PRAMOD	U17MB256	
7	ATHUL SUBHASH	U17MB257	
8	BATCHU JASWANTH BABA	U17MB258	
9	BHAGANAGARAPU BHARGAV SEETA RAM	U17MB259	
10	BHARGAV JYOTI BORAH	U17MB260	
11	BHAVYA GUPTA	U17MB261	
12	BRAHMA PRAKASH MISHRA	U17MB262	
13	CHINMAY DODANI	U17MB263	
14	CHRISTO VINCENT.V	U17MB264	
15	CIBIYASHREE.G	U17MB265	
16	DEBIA JERMIN	U17MB266	
17	DEEPIKAA R.D	U17MB267	
18	DHANUSS BHUVAN SRIDARAN	U17MB268	
19	DHIREN.S	U17MB269	
20	DHWANI SOLANKI	U17MB270	

21	AANNIE SHERLINE RAJAM.L	U17MB271	
22	AARTHISEKAR . D	U17MB272	
23	AARYA R BABU	U17MB273	
24	ABHIJITH.K	U17MB274	
25	ABHISHEIK.J	U17MB275	

RESOURCE PERSON **COORDINATOR**

SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EI TON AND RESEARCH

Annexure - III

WHONET basics in Microbiology Laborato

Aayak Babu

Course code: MIC07

I. ANSWER THE QUESTIONS:

1. What is the Role of Microbiology Department in WHONET application?

- loading patient Information
- patient report

2. What is WHONET?

- window based database software

3. What are the uses of WHONET ?

- useful in medical field
- Laboratory

4. Why we should adopt to WHONET ?

- Easy to use

5. How do you do data analysis in WHONET?

- Common commercial database
- Spreadsheet Software

SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

Annexure - III

WHONET basics in Microbiology Laboratory

Dhiren

Course Code: MIC07

I. ANSWER THE QUESTIONS:

1. What is the Role of Microbiology Department in WHONET application?

- patient report
- loading patient information
- Organisms.

2. What is WHONET?

- windoo base database software

3. What are the uses of WHONET ?

- lab oriented use
- useful in medical field

4. Why we should adopt to WHONET ?

- Backlink can transfer data into whonet.

5. How do you do data analysis in WHONET?

- Hospital & lab Information System through text files.

Student Feedback Form

Course Name: **Basics Of WHONET in microbiology** Subject Code: **MIC07**

Name of Student: Aaqyr R. Babu Roll No.: U17MB973

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear			✓		
2	Course contents met with your expectations				✓	
3	Lecturer sequence was well planned				✓	
4	Lectures were clear and easy to understand				✓	
5	Teaching aids were effective				✓	
6	Instructors encourage interaction and were helpful			✓		
7	The level of the course				✓	
8	Overall rating of the course	1	2	3	4	5

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

Signature

Date: 31/10/2018

Student Feedback Form

Course Name: **Basics Of WHONET in microbiology** Subject Code: **MIC07**

Name of Student: Dhiren . S Roll No.: UI7MB269

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear			✓		
2	Course contents met with your expectations		✓			
3	Lecturer sequence was well planned				✓	
4	Lectures were clear and easy to understand		✓			
5	Teaching aids were effective				✓	
6	Instructors encourage interaction and were helpful				✓	
7	The level of the course				✓	
8	Overall rating of the course	1	2	3	4	5

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

Signature

Date: 31/10/2018

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research
(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that AARYA. BABU. R has actively participated in the Value Added Course on Basics Of WHONET in Microbiology held during July 2017 – Oct 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. C.Naveenkumar
RESOURCE PERSON

Dr.Abarna.V
COORDINATOR

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research
(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that DHIREN has actively participated in the Value Added Course on Basics Of WHONET in Microbiology held during July 2017 – Oct 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. C.Naveenkumar
RESOURCE PERSON

Dr.Abarna.V
COORDINATOR

Date : 31.10.18

From
Dr.Naveenkumar.C,
Department of Microbiology,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Through Proper Channel

To
The Dean,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Completion of value-added course : WHONET basics in Microbiology Laboratory

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: WHONET basics in Microbiology Laboratory on July 2018 for 40 students. We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards,

Dr.Naveenkumar.C,

Department of Microbiology,

Encl: Certificates

Photographs