

#### Dr. Vithalrao Vikhe Patil Foundation's



# Medical College& Hospital Vilad Ghat Ahmednagar



# **DEPARTMENT OF PHYSIOLOGY**

Physiology is indeed an explanation of life. What other subject matter is more fascinating, more exciting, more beautiful than the subject of life? - Arthur C Guyton

#### **HOME**

Welcome to the Department of Medical Physiology at DVVPFS Medical College, Ahmednagar. The department of physiology was started in the year 2004 under the guidance of great academician Dr.Amita Adhiya madam and presently headed by Dr. Sunita Nighute. The department has been gradually upgraded to present status by experienced faculty. First undergraduate batch in 2004 had a capacity of 100 seats and now it is 200 seats.

The department of Physiology has excellent infrastructure and faculties with wide experience and knowledge in different fields of Physiology thus providing quality teaching, research in innovative and emerging fields and clinical services in the university.

The department provides Physiology teaching to medical and various para-medical students in the University. The faculties are trained both in teaching (Medical Education) and research (PhD scholars) which helps to nurture skills in the students.. Three faculties have completed training in medical education. The department has an Exercise physiology Lab which offers support to the clinical departments by evaluating the cardiovascular functions. The department performs various researches and has published research papers in renowned, high impact factor journals. The department also conducts CPDs and seminars frequently to update the newer and upcoming concepts.

Department is actively involved in outreach activities such as conducting health awareness programs in schools and Brothels. Recently "Award for research in medical physiology" by CIMCON foundation and MAIER Society was awarded to the head of the department Physiology.

Our priority for medical students is to enhance our teaching efforts with an emphasis on developing stimulating medically relevant interactive sessions. We offer a variety of undergraduate courses including physiology of cell, physiology of excitable tissues, physiology of blood, physiology of cardiovascular, physiology of kidney, physiology of

nervous system, physiology of digestive and physiology of endocrine systems for

medical and paramedical students.

Our staff members continue to strive for innovative and novel approaches to

research. Some of the areas of research in our department include renal,

cardiovascular, endocrine, cellular, molecular and neurophysiology. We are fortunate

to have faculty who are recognized researchers and scholars in their fields, talented

and stimulating teachers, and committed to effective intra-and interdepartmental

collaboration.

We are very pleased to have so many outstanding individuals contributing to the

success of the Department of Medical Physiology. We strive to continue to provide

innovative research and outstanding teaching that will assist in understanding the

mechanisms underlying diseases and generate great leaders in their field. Thank you

for visiting our manual and I invite you to explore our department further to learn more

about our research activities and our education programs.

Best

Regards

Head of Department

Prof Dr. Sunita Nighute.

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#### **VISION & MISSION**

#### VISION

- In education, to improve the standards of teaching to both undergraduate and postgraduate students that copes with the global levels.
- In research, we work towards being a leading department where we aim to conduct researches which can solve many significant problems in our community and contribute significantly to the advancement of scientific and medical knowledge

#### **MISSION**

Physiology Department works to achieve the following objectives:

- ☐ To provide educational services in the field of physiology:
- Teaching and practical training for undergraduate students of First Year and Second Faculty of Medicine.
- Teaching and practical training for students of various colleges like
   Physiotherapy and Nursing benefiting from the study of physiology.
- To provide continuing medical education for doctors in various medical specialties benefiting from the physiological study after graduation.
- ☐ Conducting research in the field of Medical Physiology

#### **ROLE OF DEPARTMENT**

- a) Physiology is the integrative study of cellular and whole-body function, and is the pivotal discipline linking other basic biomedical sciences on the one hand with experimental and clinical medicine on the other.
- b) The department of Physiology has excellent infrastructure and faculties with wide experience and knowledge in different fields of Physiology thus providing quality teaching, research in innovative and emerging fields and clinical services in the university.
- c) We are a teaching- and research-intensive department focusing on advanced studies in cardiovascular physiology, cellular and systems neurophysiology, cellular and molecular physiology, endocrinology, fetal/neonatal physiology, membrane biophysics and transport physiology, renal physiology, respiratory physiology, vision, and the interfaces between these fields.
- d) Our Department is dedicated to understanding fundamental physiological processes and translating these to clinical care.
- e) We are committed to help equip and infuse in our students a life-long love for learning, the excitement of discovery and a keen sense of curiosity about the chemical, physical and biological functions of life.
- f) In research, we work towards being a leading Pre-Clinical department where we aim to contribute significantly to the advancement of scientific and medical knowledge.

#### **SCOPE OF SERVICES**

Department of physiology has broadened its scope to include training in

- Sports Physiology
- Neurophysiology
- Diabetes, Thyroid and other endocrinology disorders
- Hematology
- Respiratory physiology

- Geriatric and
- ANS physiology

#### INFRASTRUCTURE OF THE DEPARTMENT

Physiology department is situated on the 2 nd floor of medical college building and includes-

Faculty offices-

**HOD Office** 

Associate professors office-02

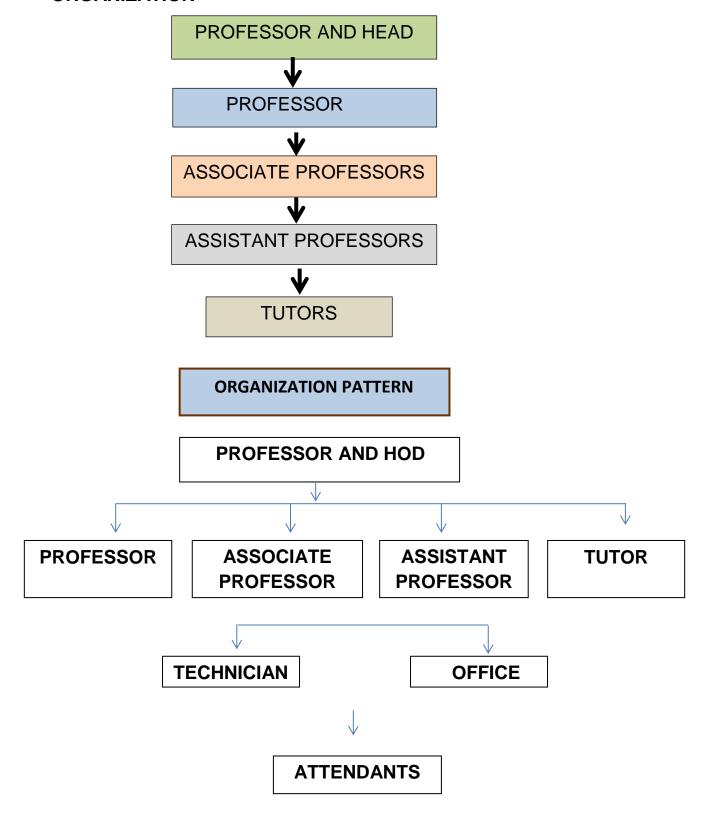
Assistant professors office-04

Tutors office-04

Non-teaching room-1

- Departmental Office
- Departmental library/Seminar room
- Demonstration room- 02
- Departmental Research lab
- Hematology lab with preparation room
- Clinical lab with preparation room
- Store room -02

#### **ORGANIZATION**



# TEACHING STAFF

N	Name of the Faculty	Desi gnati	Registratio n	DOJ	Qualif ication	Specializ a	Mob. No.	E- Mail ID
0	Tacuity	on	11		Ication	tion	INO.	
1	Dr. Sunita Nighute	Prof. & HO D	2003/01/00	1.11. 2014	MBB S MD	Physiolo gy	70570 22893	drsunitanighute @gmail.com
2	Dr. Kiran Buge	Prof	2009/10/36	2.2. 2015	MBB S MD	Physiolo gy	89831 92769	bugekiran@gm ail.com
3	Dr.Dnyanes h Gagare	Asso Prof.	NA	17.9. 2007	MSC Med Physio (PhD)	Physiolo gy	90490 44705	dgagare@yaho o.co.in
4	Dr. Rangaro Bhise	Asso Prof.	2009/09/31 38	22.1. 2018	MBB S MD	Physiolo gy	96239 34420	rangrao.bhise @gmail.com
5	Dr. Nisha Gandhi	Asst. Prof.	MCI/08- 32247	15.12 2020	MBB S MD	Physiolo gy	96731 59959	nisha.surana.8 4@gmail.com
6	Dr. B S Karale	Asst. Prof	2008/04/1 492	01.6. 2022	MBB S MD	Physiolo gy	76663 11537	drbskarale@g mail.com
7	Dr. Pravin Dongare	Tuto	2008/0/265	19.6. 2012	MBB S	Physiolo gy	95279 31384	dpravin123@g mail.com
8	Dr. Madane Ashok L	Tuto	2011/12/34 17	1.12. 2020	MBB S	Physiolo gy	86249 03483	ashokmadaneor th03@gmail.co m
9	Dr.Ms.M.S Shaikh	Tuto	2013/09/28 22	25.10 .2021	MBB S	Physiolo gy	976672 0864	
10	Dr. Mahesh B Late	Tuto	2009/ 05/2181	27.09 .2021	MBB S	Physiolo gy	77383 27201	

# NON-TEACHING STAFF

Sr. No.	Name of the Staff	Designation
1.	Mr. Pawar S.U.	Lab.Tech
2.	Mr Gite B A	Store Keeper/Clerk/Comp. Operator
3.	Mr. Manoj Gaikawad	Sweeper
4.	Mrs.Sheetal Busari	Lab attendant

#### **DUTIES AND RESPONSIBILITIES**

#### Responsibilities and Duties of Professor and HOD

- To perform duties given under statutory provisions of Medical Council of India,
   Maharashtra Medical Council, Maharashtra University of Health Sciences and
   Dr. Vitthalrao Vikhe-Patil Foundation (DVVPF).
- To ensure implementation of various rules, acts and laws related to Medical Education and Hospital services Acts related to various allied specialties, enacted by Government of India and State Government for the purpose of conducting various Medical Undergraduate and Paramedical courses.
- To maintain and continually improve the standards of medical education and research with reference to NAAC, MCI and other accreditation authorities.
- To implement policies laid down from time to time in order to work towards achieving the vision and mission of the Institution and the department
- Strive to keep up and improve on the reputation of the institution as a center of excellence in the field of medical education, training and research.
- To maintain disciplined, ethical, humane and courteous culture in the and around department.

#### **Academic Responsibilities:**

Administrative and supervisory duties:

- To perform all such duties under statutory provision of various acts laid down by the University which, govern the services of the staff working in the department. This also includes laws, acts and rules applicable and adapted by the university.
- Prepare annual budget for the department timely for smooth running of the department.

- Establishment of matters like control over staff of the department by:
- a) Distribution of duties and responsibilities Administrative, Academics, and outreach
- b) Discipline, Regularity and punctuality by maintaining muster roll, movement registers etc.
- c) Ensure smooth functioning of the department during leaves of the staff members and vacations etc.
- d) Proposals for promotion Monitor academic performance of staff periodically and encourage them to improve and update themselves so as to achieve excellence.
- e) To serve memorandum and call for explanations from undisciplined, irregular, irresponsible staff and propose suitable action against them.
- f) Initiate the annual performance appraisals of staff.
- To achieve desired levels of academic performance by helping to organize,
   Distribute, monitor, punctuate and also perform academic activities like
- a) Conducting Graduate teaching & training activities as per schedule
- b) Conducting practical's, Tutorials, Periodic tests and examinations,
- c) Instructions programs for slow learners,
- Conducting University examinations Theory and Practical
- To work as Paper setter, Moderator, examiner, CAP evaluator etc.,
- To prepare a time bound teaching and training schedule with aim of building clinical competence and strive to achieve desired objective in time for UGs
- To evaluate the progress of undergraduate students,
- Ensure regularity, punctuality and discipline amongst UG students. Imbibe work culture, cordial inter personal relations amongst them,
- Make UG students conversant with communication skills and counseling

procedures.

a) Encourage students to participate in conference, extracurricular activities, at college,

university & higher levels,

- b) Guiding & helping faculty to develop teaching skills by allotting theory Classes and practical classes under supervision of seniors.
- c) Identifying weak areas of faculty in teaching, learning, research etc. and overcoming

the problems by suitable counseling and guidance..

- To identify the aptitude, competencies and special interests of the faculty and give them suitable job responsibilities or value additions to their regular duties.
- To prepare and pursue proposals for qualitative upgradation of the department and the institution at large.
- To identify potential talents amongst staff and encourage them to achieve better and newer, skills through in service training, fellow ships, refresher courses through institutional resources whenever possible.
- Help faculty to achieve desired levels of performance by upgrading & updating departmental library.
- Ensure availability of medical equipment that is in good working condition.
   Ensure timely procurement of new equipment. Strive to fill up gaps between
   MCI recommendations and available equipment and instruments.
- Ensure maximum faculty is exposed to medical education training (MET) program.
- To work on college council and other committees (academic, administrative)
  as required by the institution.

- To organize guest lectures, live workshops, CME, Conferences by renowned professionals and also participates in such activities in other institutions.
- To ensure research work, publications, participation in Conferences, workshops, seminars etc. at Institutional, State, National and International levels and encourage the faculty to do the same.
- Be vigilant about ragging, gender harassment and welfare of physically handicapped staff and students.
- To ensure appropriate arrangement for smooth functioning of the department while proceeding on temporary duty, leave or any kind or vacation by making suitable arrangement.

## **Responsibilities and Duties of Professor**

- To perform duties given under statutory provisions of Medical Council of India,
   Maharashtra Medical Council, MUHS and VIMS.
- To abide by various rules, acts and laws related to medical Education and Hospital services Acts related to various specialties, enacted by State Government and Government of India for the purpose of conducting various Medical Undergraduates and Paramedical courses.
- To maintain and continually improve the desired standards of Medical education, Research with reference to NAAC, MCI and other accreditation authorities. To perform all such duties under statutory provision of various acts laid down by MUHS which govern the services of the staff working in the department. This includes laws, acts and rules applicable and adapted by the University.
- To maintain well-organized, courteous, ethical, and benevolent culture in the department and institution at large.

## **Academic Activities/ Responsibilities:**

- To achieve desired levels of academic performance by
  - a) To help HOD to organize, distribute, monitor, punctuate and also perform academic activities like conduct UG teaching & training activities as per schedule in collaboration with HOD
  - b) Conducting practical's Tutorials, Periodic tests and examinations.
  - c) Instructions programs for slow learners,

- d) To conduct examinations-Theory and practical
- e) To work as paper setter, Moderator etc.
- f) To evaluate the progress of UG students, under him/her.
- g) Make UG students conversant with communication skills and counseling procedures,
- h) To work as HOD when he is on leave/vacation/out of station for duty purpose.
- i) Encourage students to participate in extracurricular activities, at College, University & higher levels
- To identify weak areas of faculty in teaching, learning, research etc. and overcoming the problems by suitable counseling and guidance.
  - To monitoring performance (Academic) of faculty & apprising them about the areas that need improvement. Helping and guiding them bring about desired change.
- To initiate, encourage, guide and help faculty in the department conducting research and publish research papers of high quality in journals of desired status. The research should try to be oriented to have academic and social impact.,
- To help HOD in upgrading and updating departmental and central library
- To help the HOD for the purchase of new equipment and keeping existing equipment in good working condition by timely repairs and servicing.
- To carry out research work, produce publications; participate in conferences, workshops, seminars, symposia etc. at Institutional, State, National and International levels.

 While proceeding on leave of any kind or vacation after making a locum arrangement of permission from HOD

#### Responsibilities and Duties of Associate Professor

#### ☐ Reports to Head of Department

- To perform duties given under statutory provisions of Medical Council of India ,
   Maharashtra Medical Council and MUHS
- They will ensure that all teaching tasks allotted to them are carried out efficiently.
- They will assist the HOD in teaching, research and other duties.
- They will carry out any other duties allotted to them by the Head of the department.
- They will look after the general administration of the department which will include security and welfare of personnel, conferences and inspection of the department.
- They will supervise the training program of undergraduates, which will include classes, attendance, tutorials and internal assessments.
- They will supervise the maintenance of departmental office files, UG students log-books and /inspection files.
- In consultation with the HOD, will put up demands for purchase of various items for the department.
- They will assist the HOD in clearing all observations on departmental UG teaching related issues.

## **Responsibilities and Duties of Assistant Professors**

- ☐ Reports to Head of Department
- To perform duties given under statutory provisions of Medical Council of India,
   Maharashtra Medical Council and MUHS.
- They will assist the Head of the dept. in the program of the various courses conducted at the college.
- They will perform any other duties allotted to them by the Head of department
- They will be nominated by HOD to be OIC Library, museum, seminar rooms
- They will be nominated as OIC updates / Seminar / CMEs. He will work under guidance from HOD

An assistant professor, so nominated by the HOD, will be responsible for the training program, lecture classes, setting of question papers, marking of answer sheets and tabulation of results for internal assessment.

## **Responsibilities and Duties of Tutor-**

e)

Reports to Assistant Professor, Associate Professor and Head of Department Role and Responsibilities: Academic a) Tutor is a link between the faculty and students. He will be fully responsible for the teaching for under graduate students. They b) are required to participate in: Conducting Tutorials, practical's Periodic tests and examinations, Inter-disciplinary teaching, Special Instructional programs for slow learners, c) Any other academic work given by the Head of the Department and Institution d) al Head

To demonstrate practical procedures to UG Students.

## Responsibilities and Duties of Lab Technician-

- Sets up and prepares class demonstrations and experiments working from knowledge of the subject area, reference materials, course outline, and without specific instructions.
- Orders, receive, supplies the stocks materials and equipment for laboratory use.
- Issues and maintains records on materials loaned to students, instructors, and other departments;
- Demonstrates and provides instruction to students in proper use and care of laboratory materials and equipment; assists in maintaining security of laboratories, laboratory equipment, supplies, and materials.
- Prepares and dispenses solutions and chemical materials used for lab classes which may include reagents, chemicals, acids, stains and unknowns.
- Prepares stains, solutions, and preservatives by mixing, bottling, and labeling.
- Cleans up after each lab session by washing, and if necessary, sterilizing tools, equipment and supplies.
- May calibrate, maintain, and perform repairs on scientific equipment and supplies.
- May assist faculty in assembling printed class materials.
- May supervise and assign work of student assistants.
- May maintain expenditure records and provide data for budget estimates.

 Monitors production of, collects, and processes hazardous waste materials and toxic chemicals resulting from lab classes, collects and properly stores biohazard waste.

## Responsibilities and Duties of Department clerk

- Daily UG attendance.
- Assisting in conduction of exams.
- Maintenance of records in department.
- Maintenance of UG internal assessment files
- Circulation of academic circulars to the faculty members

## Responsibilities and Duties of Department Lab attendant

- One Attender and one sweeper were appointed for the physiology department
- Opens and cleans the Teaching and Non-teaching rooms in the morning at 8:00 am.
- Open the class rooms and demo rooms before the lecture hours and the library as and when required for the staff for reading the books.
- During the practical hours they open the required practical labs
- Closes all the teaching and non-teaching staff rooms and laboratories at 5:00pm
- Circulate all the academic circulars which are communicated from dean and HOD office to all the teaching and Non-teaching staff members.

## <u>Duties</u> and responsibilities of haematology lab in charge

- It is mandatory to maintain silence in the clinical lab.
- To assist the students in proper usage of the resources in the hematology lab.
- To monitor and maintain a register for issuing and returning the instruments.
- To collect fine from the students if they are not returning the instruments after the use or any breakage of instrument as per breakage policy of the lab.
- To observe the instruments and other lab used materials are placed in the appropriate place of the lab.
- To observe the practical are to be conducted in time and with proper use of instruments.
- To monitor and check the maintenance of hematology lab instruments timely and maintain the register.
- To monitor the sops of hematology lab.
- To monitor the SOP s of sick room if any incidence happens.
- To assist the head of the department for purchase of the updated instruments for benefit of the students.
- To check the proper functioning of lights, fans and furniture in the lab.

## <u>Duties and Responsibilities of clinical lab In charge</u>

- It is mandatory to maintain silence in the clinical lab.
- To assist the students in proper usage of the resources in the clinical lab.
- To monitor and maintain a register for issuing and returning the instruments.

- To collect fine from the students if they are not returning the instruments after the use or any breakage of instrument as per breakage policy of the lab.
- To observe the instruments and other clinical materials are placed in the appropriate place of the clinical lab.
- To observe the practical are to be conducted in time and with proper use of instruments.
- To monitor and check the maintenance of clinical lab instruments timely and maintain the register.
- To monitor the SOP s of sick room if any incidence happens.
- To assist the head of the department for purchase of the updated instruments for benefit of the students.
- To check the proper functioning of lights, fans and furniture in the lab.

## **Duties and responsibilities of research lab in charge**

- It is mandatory to maintain silence in the research lab.
- To motivate the students for research purpose.
- To assist the students and faculties in proper usage of the resources in the research lab.
- To monitor and maintain a register for issuing and returning the instruments
- To collect fine from the students and faculties if they are not returning the instruments after the use or any breakage of instrument as per breakage policy of the lab.
- To observe the instruments and other related materials are placed in the appropriate place of the research lab.
- To monitor and check the maintenance of research lab instruments timely and maintain the register.

## **Duties and responsibilities of library in charge**

- It is mandatory to maintain silence in the library.
- To assist the staff in proper usage of the resources.
- To maintain a register for issuing and returning the books.
- To collect the issued books in time.
- To collect fine from the faculty if they are not returning after the due date.
- To observe the books, Journals and CDs/DVDs are placed in the appropriate departmental library shelves in the Library.
- To check the proper functioning of lights, fans and furniture.

#### MAINTENANCE OF THE DEPARTMENT

#### STANDARD OPERATING PROCEDURES

The procedures adapted for maintenance of physiology department.

Policies regarding general departmental functioning, class rooms, laboratories, library and departmental offices/rooms

- 1) General departmental functioning
- 2) Class Rooms
- 3) Teaching program
- 4) Learning and Evaluation
- 5) Departmental library
- 6) Physiology laboratories
- 7) Departmental offices and rooms
- 8) First aid procedures
- 9) Research protocol

## **GENERAL DEPARTMENTAL FUNCTIONING**

## (STANDARD OPERATING PROCEDURE)

- a) The faculty members are required to sign biometrics before 9:10 am and while leaving the department at 5.00 pm.
- b) The teaching and non-teaching faculty members are required to sign the departmental register before 9.30 am daily. Those having lectures at 9 o clock

they should sign the register and go for the lecture or for any other work of the institution and while leaving the department at 5.00 pm.

- c) Faculty should not leave the department without head of the department permission.
- d) Any sort of leave should be informed to Head of the Department and in absence of HOD leave should be informed to Head in charge.
- e) The faculty members are required to carry out their duties as per the defined protocols provided to them.
- f) The faculty members should get involved in daily programs of the department.
- g) The faculty members are required to attend interdepartmental academics activities as per scheduled timetable.
- h) The faculty members are required to attend departmental meetings with the head of the department.
- i) It is required for all faculty members to apply for leave with prior intimation.
- j) Senior faculty members are required to sensitize there juniors and the students for research activities in particular and they are required to publish at least one article in one academic year as per norms.

- k) All teachers as a part of the department are required to follow the fruitful communication skill with their colleagues& students for achieving best outcomes and for departmental functioning.
- I) Technical staff is required to assist faculty in assembling printed class materials.
- j) Technical staff will Sets up and prepares class demonstrations and experiments working from knowledge of the subject area, reference materials, course outline, and with specific instructions by head of the department.
- k) Clerical staff is required to maintain daily UG attendance, leave records of faculty and Circulation of academic circulars to the faculty members and display of weekly academic schedule for students to notice board of the department.
- I) Attender appointed for the physiology Department are required to come at 8:00 am in the morning and will do their routine activity like opening the offices, laboratories, and departmental library and its cleaning and dusting.
- m) They should close all the offices, laboratories, museum and departmental library at 5:00pm and deposition of keys under supervision of clerical staff.

#### **CLASS ROOMS**

- a) All Class Rooms are cleaned every day before and after the classes commence.
- b) The Class Rooms are well ventilated and lighting facilities are regularly inspected BY class room in charge.
- c) Class room in charge (Technical staff) will check the availability of class rooms for the lectures and practical's during the preparation of weekly departmental time table for the MBBS, BPTH and NURSING STUDENTS.
- d) Class rooms are ICT enabled .LCD projectors and Wi- Fi facility are used to aid and improve the teaching-learning process in all the classrooms and in charge will regularly inspect and assured its proper functioning.
- e) Engineer from maintenance department for maintenance of ICT facilities in class rooms (call on-234)

#### **TEACHING PROGRAM**

- a) Before starting the UG Academic session the teaching schedule will be discussed and allotted to concern teachers under the guidance of head of the department
- b) Master time table (term wise) will be prepared for the same undergraduate academic session.
- c) During the actual academic session clerical staff will prepare and display weekly teaching schedule on departmental notice board under the guidance of head of the department
- d) It is required that clerical staff will maintain the attendance register of the undergraduate students for teaching sessions and exams conducted by the department.
- e) Teaching staff will Conduct Graduate teaching & training activities as per schedule
- f) Teaching staff will also conduct practicals, Tutorials, Periodic tests and examinations in the department
- g) Teaching staff will Conduct University examinations Theory and Practical as per schedule of university
  - h) Instructions programs for slow learners will be arranged.
- i) Head of the department will ensure regularity, punctuality and discipline amongst UG students. Imbibe work culture, cordial inter personal relations amongst them.
- j) Teaching Faculty will assist the HOD in clearing all observations on departmental UG teaching related issues.

#### **LEARNING AND EVALUATION**

- The time bound teaching and training schedule with aim of building clinical competence and strive to achieve desired objective in time for UGs.
- Learning and communication skills of UG students will be developed by
- a) Encouraging students to participate in conference, extracurricular activities, at college, university & higher levels.
- b) Identifying weak areas of students in learning and research etc. and overcoming the problems by suitable counseling and by guidance.
- c) Organizing guest lectures, live workshops, CME, Conferences by renowned professionals.
- d) Conducting seminars, integrated teaching, small group learning, problem based learning and early clinical exposure secessions.
- e) Arranging model and chart making and presentation competition at the institution and intercollege level
- The progress of undergraduate students will be assessed and evaluated by -Essay questions, clinical problems, modified essay questions (MEQs) checklists, OSCE, student projects, MCQs, Critical reading papers, rating scales, extended matching items, tutor reports, portfolios, log book, audit, simulated patient demonstration, video assessment, simulators, self-assessment, peer assessment.

## **DEPARTMENTAL LIBRARY**

- a) The departmental library is open for all faculties and UG students of Department of Physiology during college hours.
- b) All users are required to sign the register kept with the clerk of the department who has been designated as custodian of the library.
- c) Irrespective of the status of the faculty member or the student seniority; all are required to take permission before withdrawing the books for reading purpose and put signature and relevant details of the book / journal in the register.
- d) After reading the books, on return sign the register with due time and date.
- e) No-one is allowed to borrow the books for reading purpose outside the departmental library.
- f) Custodian is instructed to inform HOD the names of the faculty members / students who are breaking library rules.

#### **SOP FOR E-LIBRARY**

- a) E-Library is available and accessible in the central and departmental library.
- b) The password is kept open in the library and with the custodian and can be utilized for academic purpose.
- c) The facilities LAQ's, SAQ's and MCQ's are available on E-Library, various text and journal extensions, textbook and journals are available on E-Library. The list of which is available with the librarian.
- d) Individual having their own laptop may access this facility for E-Library and home /office for self-use.
- e) In case of any difficulties in operation one can approach In charge of central library on extension No. 314 during college hours.

# DEPARTMENTAL LABORATORIES (STANDARD OPERATING PROCEDURE)

- a) DOAP sessions and practical are conducted in the laboratories.
- b) Technical staff will Sets up and prepares class demonstrations and experiments from knowledge of the course outline and per specific instructions from the Head of the Department.
- c) Students will check the laboratory schedule a day earlier, read up the relevant topic from the practical book.
- d) Wearing of apron is mandatory in the laboratories.
- e) Students should bring the appropriate journals when attending a practical class.
- f) Technical staff will Demonstrates and provides instruction to students in proper use and care of laboratory materials and equipment; assists in maintaining security of laboratories, laboratory equipment, supplies, and materials
- g) All students will take care for maintaining the laboratories in a clean, tidy, safe condition. Eating, drinking and cell phones are not allowed in the laboratories.
- h) Pay due attention to the practical demonstration given by your teacher before each experiment.
- i) Apparatus required for performing experiments will be delivered only after signing in the record register with laboratory technician.
- j) Check the apparatus being issued to you. If there is any breakage or damage to the apparatus, it must be reported to the technician before starting the experiment. After completion before returning they shall be cleaned properly.

- k) The students must know the aims and objectives of the experiment; perform the experiment in orderly manner.
- I) Working area on the work table must be clean; equipment's should be placed in proper manner & handled carefully.
- m) During hematology practical's use of spirit swabs before taking prick is essential to prevent infection.
- n) Do not throw any used cotton, pieces of paper and needles into the sink.
- o) Pricking needles and lancet should first burn in needle burner and then dispose it into white transparent container.
- p) Cotton swabs and pieces of papers are required to dispose in yellow container.
- q) Technical staff will Cleans up after each lab session by washing, and if necessary, sterilizing tools, equipment and supplies.
- r) Lab attender will clean up the surfaces of hematology experimental table with absorbent material, and then add 1% hypochlorite, after 20 min mop it and then clean it with plain water. Dispose this absorbent material into red container.
- s) During clinical physiology practical's students should bring instruments like stethoscope, Knee hammer and pocket torch.
- t) Maintain the humanity and compassion with the provided subject.
- u) Before starting the practical explain the procedure to the subject
- v) Do not indulge in useless gossip; you can discuss your difficulties with technician or teacher.
- w) Writing of Journals with Correct diagrams & in good handwriting is essential.
- x) After completion of experiment, complete the concerned topic & get it checked by the concerned teacher.

#### PROCUREMENT OF EQUIPMENT/ CHEMICALS / GLASSWARE

- a) The Technical staff informs the teacher- in-charge about the stock of chemicals, glassware and equipment.
- b) Requisition from department for requirement of equipment/ Chemicals / Glassware in every academic year is send to purchase department by head of the department
- c) Order is placed through Principal's office.
- d) The equipment and chemicals are entered in the main stock register of the department by the technical staff along with bill number

#### ISSUE OF GLASSWARE/EQUIPMENT'S TO STUDENTS

- a) Glass apparatus are issued to the students by the technical staff
- b) A breakage register is maintained in each lab where broken equipment is recorded with the students and teachers signature.
- c) Chemical prepared in each lab is also maintained in a register.
- d) Record of apparatus issued on daily basis is recorded in a separate register.

## Maintenance of equipment's

- a) Dusting of equipment and working area are carried out on a regular basis.
- b) Maintenance of equipment is carried out every six months.

c) Working condition of equipment is routinely checked by technical staff under the quidance of head of the department

#### **FIRST AID PROCEDURES**

## (STANDARD OPERATING PROCEDURE)

- a) Assess the situation. Be sure the situation is safe for you to approach. The following dangers will require caution: live electrical wires, gas leaks, building damage, fire or smoke, poisoning, any medical emergencies and violence.
- b) A responsible staff should stay at the scene and give help until the person designated to handle emergencies arrives.
- c) Send word to the person designated to handle emergencies. This person will take charge of the emergency, render any further first aid needed and call for additional resources as required.
- d) Follow the guidelines for neck and spine injuries to move a severely injured or ill student or staff for immediate safety.
- e) Under no circumstances should a sick or injured student be sent home without the knowledge and permission of the parent or legal guardian.
- f) In the presence of a life threatening emergency, call 0241-2778042 (extension casualty 100, MICU 300, Dean 272, MIDC Police station 0241- 241 6123 or local emergency number.
- g) Contact immediately to departmental in charge. Head of the department Mrs. Sunita Nighute 7057022893, Clinical Lab Incharge Dr. Rangrao Bhise 9623934420, Dr. Kiran Buge 8983192769, Hematology Lab Incharge Mr. Shinde 9518781741.

h) The responsible college authority or a designated employee should then notify the parent or legal guardian of the emergency as soon as possible to determine the appropriate course of action.

#### RESEARCH PROTOCOL

## (STANDARD OPERATING PROCEDURE)

- a) Motivation to the students and faculties for the utilisation of research facilities in the department.
- b) Ensure the availability of instrument for the research topic selected.
- c) Discussion with other the faculty members and head of the department for different inputs.
- d) Finalise the research work to be done.
- e) Get the approval from the head of the department
- f)Apply for the presentation in front of the ethical and technical committee.
- g) Get its approval.
- h) If funded project then register for ICMR or other agencies.
- i) Start the project.
- j) Timely feedback about research progress to guide and head of the department.
- k) After collection of data and calculations discuss with other staff members

and head of the department.

I) After completion process it for presentations or publications.

# **Heads of Department with Duration**

Sr No	Name of HOD	Duration	Total
1	Dr. Ms. Adhiya Amita	01.01.2004 to	08 years 08 months
		11/08/2012	
2	Dr. Gauri Pradhan	13/08/2012 to	07 years 3 months
		07/11/2019	
3	Dr.Sunita Nighute	08/11/2019 to Till date	

# **UG Toppers in Physiology**

S.No	Name Of Students	Marks	Academic Year
1	Jain P.V.	152	2004-5
2	Bendale S.D.	156	2005-6
3	Pol. J.J.	154	2006-7
4	Birbal jain A.	145	2007-8
5	Nair S.S.	145	2007-8
6	Jain V.	146	2008-9
7	Desi A.R.	137	2009-10
8	Gujarathi H.V.	137	2009-10
9	Telang B. M.	152	2010-11
10	Modak Aditya	156	2012-13
11	Kubal Sahil	153	2013-14
12	Upadhyay Prabhakar	153	2013-14
13	Bhosale Aditya	154	2014-15
14	Hakim Yusuf	154	2014-15
15	Ghogare Manasi	158	2015-16
16	Borhade Rohan	161	2016-17
17	Bhoosreddy Aryaman	160	2016-17
18	Toshniwal Gayatri	160	2017-18
19	Pawse Richa	160	2017-18
20	Patil Rucha	158	2018-19
21	Bhumi trivedi	232	2019-20
22	Sahetya Aishwarya	229	2020-21
23	Swami Vaishnavi	228	
	Rupnarayan Rohit	228	2021-22

## **List of First Year MBBS Distinction students**

S.No	Year	Name of the students	Marks obtained 200
1	2004-5	Jain P.V.	152
2	2005-6	Bendale S.D.	156
3	2010-11	Telang B. M.	152
4	2006-7	Pol. J.J.	154
5	2012-13	Modak Aditya	156
6	2013-14	Kubal Sahil	153
7	2013-14	Upadhyay Prabhakar	153
8	2013-14	Patil Shantanu	151
9	2013-14	Mehata Rahul	150
10	2013-14	Nilanjana	150
11	2013-14	Prithviraj Neha	150
12	2014-15	Bhosale Aditya	154
13	2014-15	Hakim Yusuf	154
14	2015-16	Ghogare Manasi	158
15	2015-16	Jadhav Pravin	155
16	2015-16	Sharma Darshan	153
17	2015-16	Divit Asmita	152
18	2015-16	Chavan Shubham	150
19	2015-16	Shah Kashyap	150
20	2016-17	Borhade Rohan	161
21	2016-17	Bhoosreddy Aryaman	160
22	2016-17	Patil Rishabh	157
23	2016-17	Kshirsagar Trisha	155
24	2016-17	Patil Bhakti	150
25	2017-18	Toshniwal Gayatri	160
26	2017-18	Pawse Richa	160
27	2017-18	Sisodiya Gayatri	158
28	2017-18	Arika Pareek	150
29	2018-19	Patil Rucha	158
30	2018-19	Vaishnavi Ravi	156
31	2018-19	Tiwari Gauri	154

32	2019-20	Bhumi Trivedi	232	
		Riya wayal	228	
		Bolar tanushri	230	
22	2020-21	Sahetya Aishwarya	229	
23	2021-22	Swami Vaishnavi		
		Rupnarayan Rohit	228	
			228	

# **Additional Qualifications of faculty**

### Dr. Sunita Nighute-

Fellowship in thyroid disorders (PHFI, DELHI)

Diploma in nutrition 2020

## Dr. Dnyanesh Gagare -

PhD.(medical physiology)

#### Dr.Kiran Buge-

- 1) Fellowship in thyroid disorders (PHFI, DELHI)
- Certificate course in evidence based diabetic management
   (PHFI\_DELHI)
- 3) Diploma in nutrition 2020

#### Dr. Rangraoi Bhise-

P G Diploma in Hospital Administration (Medversity Online Limited, Hyderabad)

# **Appointments of Staff (Journals)**

#### **Dr. Sunita Nighute**

- i) Editorial board member for the journal of international Physiology of red flower publications.
- ii) On reviewer board of Indian journal of clinical anatomy and physiology of innovative publications New Delhi.
- iii) On reviewer board of MUHS Nasik health science journal.
- iv) On reviewer board of International J of Research and innovation in Applied Sciences(IJRIAS)

#### Dr. Gagare Dnyanesh

- i) On reviewer board journal of Assisted Reproduction and Genetics
- ii) On reviewer board journal of International journal of Medical Research and Health Sciences.
- iii) Editorial board member for the journal of VIMS health science journal.

#### Dr. Kiran Buge-

 i) Editorial board member for the journal of international Physiology of red flower publications

# **Appointments at National & International Level**

#### **Dr.Sunita Nighute-**

- i) Member of Maharashtra chapter association of physiology and pharmacology.
- ii) Life member of physiology and pharmacology association of India.

#### Dr. Kiran Buge-

i) Life member of Association of physiologist of India.

## **University Level Appointments of faculty**

#### **Dr.Sunita Nighute-**

- i) As internal examiner and chairmen of MBBS and BPTH exams by MUHS Nasik.
- ii) As External examiner for MBBS, BPTH and DENTAL exams by other universities.
- iii) As paper seater for other universities.
- iv) As a Center Observer, Center Inchrge, In Vigilance Squad in MUHS theory examination.
- v) As a member of staff selection committee by MUHS Nasik.

#### **Dr. Gagare Dnyanesh-**

- i) UG examiner for the faculty of Medicine, Dental and Physiotherapy.
- ii) As a Center Observer, Center Inchrge, In Vigilance Squad in MUHS theory examination.
- iii) Appointments as a CAP Custodian in theory 'Central Assessment Process' of MUHS.

#### **Dr.Kiran Buge-**

- i) As a member of local inquiry committee for inspection by MUHS, Nasik.
- ii) As internal examiner of MBBS and BPTH exams by MUHS Nasik.
- iii) As External examiner for MBBS, BPTH and DENTAL exams by other universities.
- iv) ) As a Center Observer, Center Inchrge, In Vigilance Squad in MUHS university theory examinations.

#### Mr. Uppara siva kumar-

- i) UG examiner for the physiotherapy
- ii) As a senior supervisor in MUHS theory examinations
- iii) As a CAP Assistant custodian in theory Central Assessment process' of MUHS.

#### Dr. Rangraoi Bhise

- i) As internal examiner of MBBS and BPTH exams by MUHS Nasik.
- ii) As External examiner for MBBS, BPTH and DENTAL exams by other universities.
- iii) ) As a Center Observer, Center Inchrge, In Vigilance Squad for MUHS university theory examinations.

# Books /Chapters/copyrights published or Contributed by faculty

#### Dr Sunita Nighute and Dr kiran buge

Published Book on-"OXIDATIVE STRESS AND ANTIOXIDANT LEVEL IN DM WITH HYPERTENSION" in 2021

#### Dr. Gagare Dnyanesh-

Chapter - 'Dissertation and Thesis writing' in the book 'Research Guide' published by 'Research Cell' DVVPF's Medical College and Hospital, Ahmednagar.

# AWARDS AND APPRECIATION OF THE DEPARTMENT STAFF

Sr.	Name of	Name of Award / Appreciation	Date
No.	Staff		
1	Dr Sunita	Excellent reviewer award (Indian	2016
	Nighute	journal of clinical anatomy and	
		physiology) .	
2	Dr Sunita	Excellent reviewer award (Indian	2018
	Nighute	journal of clinical anatomy and	
		physiology)	
3	Dr Sunita	CIMCON AWARD BHOPAL	24-11- 2018
	Nighute	(Research in medical physiology ).	
4	Dr Kiran	Life time education achievement	08-03-2019
	Buge	award (National and International	
		compendium)	
5	Dr Sunita	MAIER AWARD-( med world	01-02- 2020
	Nighute	Asia international for contribution	
		in research physiology).	
6	Dr Kiran	Life time education achievement	8-03-2019.
	Buge	award (National and International	
		compendium)	
7	Dr Sunita	Selected as BOS member in	MARCH 2023
	Nighute	preclinical subjects MUHS Nasik	

#### ACHIEVEMENTS OF THE DEPARTMENT

- Arranged the Health checkup camp-lung function testing at old age home vilad ghat Ahmednagar to diagnose the restrictive and obstructive diseases.
- ➤ Department of physiology has sign the MOU with Pratibha Navkar Jain Pratisthan, Ahmednagar to screen the male and female members staying in Matoshree old age home run by Pratibha Navkar Jain Pratisthan, Ahmednagar for obstructive and restrictive lung diseases with the help of spirometry (Lung function tests)
- Arranged the awareness training programme for students of Balasaheb Vikhe Patil junior college, Ahmednagar on Cardiopulmonary resuscitation and artificial respiration.
- Arranged the awareness training programme for students of college, Ahmednagar on Cardiopulmonary resuscitation and artificial respiration.
- ➤ Students of batch 2021-22 and 2022-23 they trained more than 400 family members and relatives for CPR.
- ➤ Started Exercise physiology Lab (2021) will offers support to the clinical departments by evaluating the cardiorespiratory and Autonomic function tests.
- Organized CME
  - Topic- Challenges in Geriatrics and Healthy Aging (17/02/2019)
  - Topic-Physiological aspects of covid-19 (23/07/2021)
- ➤ Prepare a laboratory manual as per new CBME curriculum for the 1st year MBBS students.
- Arranged the' Health checkup camp' at Vikhe Patil junior college to raise awareness about health & disease along with teaching them about human physiology.

Arranged the health and awareness programme for sex workers in the area around Shevgaon, Ahmednagar.

#### Curricular/Co-curricular/extracurricular achievements of faculties

#### Dr. Sunita Nighute

- 1) Member of Maharashtra chapter association of physiology and pharmacology.
- 2) Life member of physiology and pharmacology association of India.
- 3) Editorial board member for the journal of international Physiology of red flower publications.
- 4) On reviewer board of Indian journal of clinical anatomy and physiology of innovative publications

  New Delhi.
- 5) On reviewer board of MUHS Nasik health science journal.
- 6) On reviewer board of International J of Research and innovation in Applied Sciences(IJRIAS)
- 7) Certificate course in Management of Thyroid Disorders (PHFI, Delhi)(March 2016- June 2016)
- 8) Diploma in nutrition 2020
- 9) Board of Studies in Pre-Clinical Medical Subjects for Group of Under Graduate And Post Graduate Subjects of Medicine Faculty in MUHS Nasik.
- 10) Appointed as a chairmen in a panel of LIC inspection by MUHS Nasik.
- 11) Appointed as a chairmen of flying squad panel in a theory exams by MUHS Nasik.

#### Dr. Kiran Buge-

- 1) Life member of Association of physiologist of India.
- 2) Editorial board member for the journal of international Physiology of red flower publications
- 3) Certificate course in Management of Thyroid Disorders (PHFI, Delhi)(March 2016- June 2016)
- 4) Certificate course in evidence based diabetic management (PHFI , DELHI)
- 5) Certificate course in MSCIT
- 6) Diploma in nutrition 2020

#### Dr. Gagare Dnyanesh

- 1) On reviewer board journal of Assisted Reproduction and Genetics
- 2) On reviewer board journal of International journal of Medical Research and Health Sciences.

## Dr. Rangraoi Bhise-

1) P G Diploma in Hospital Administration (Medversity Online Limited, Hyderabad)

## ACHIEVEMENTS OF THE UG STUDENT

- ➤ Students of Batch 2018-19 got appreciation certificate award for participation in model and poster making competition organized by department of physiology at vasantrao pawar medical college, Nasik
- ➤ Students from batch 2017-18 participated in quiz competition organized by dept. of physiology at DY Patil medical college Mumbai and secured third position.
- ➤ UG Student Meghna Chaudhari got third position in an online virtual MEDCON poster presentation on Topic "Analysis of impact of playing video games on cognitive functions of adolescent
- ➤ UG Student Meghna Chaudhari got her project sanctioned by ICMR as a funded project on Topic "Analysis of impact of playing video games on cognitive functions of adolescent" under guidance of dr Sunita Nighute.
- ➤ Students from batch 2019-20 participated in online quiz competition organized by dept. of physiology at Lady hardinge medical college New Delhi on 7/10/2021, got the appreciation certificates.
- Five students of batch 2022-23 submitted the project for ICMR in year 2023.

# **PUBLICATIONS BY FACULTY**

S. No	Authors Name	Name Of Article	Name Of Journal	ISSN	Index In	Year/ Month	Issu e No.V ol.	Pag e No
1	Gagare D.B.	Variation in the relative length of human 'y' chromosome	The Antiseptic	0003- 5998	Copernic us	2008 Dec.	105	607 - 608
2	A. N. Adhiya	Medico- legal Aspects of color blindness and correlation of the same to blood Groups	Indian journal of forensic medicine and Pathology	0974- 3383	Copernic us	2009 Jan	2	45- 47
3	K.D. Garkal, Shinde C.L.	Relative length of "Y" chromosome	The Antiseptic	0003- 5998	Copernic us	2009 March	105	156 - 158
4	K.D. Garkal,B Reddy, Shinde C.L.	Radiological study of wrist ossification for age determination in pediatric age. Group	The Antiseptic	0003- 5998	Copernic us	2009 May	106	226 - 230
5	Rubeena Bano, Nighute S	STUDY OF PULMONARY FUNCTION TESTS AMONG SMOKERSAND NON-SMOKERS IN A RURALAREA	Pravara Med Rev	0975- 0533	Scopus, Index Copernic us	2009;	1(1)	13- 15
6	Bhausah eb Jagdale	Pulmonary function tests in school children and adolescents.	The Antiseptic	0003- 5998	Copernic us	2010 feb	(1)1 07	183 - 189
7	V Patil	To study the effects of short term pranayama on pulmonary function tests in young adults.	Medical journal of D.Y. Patil University	2589- 8302	Copernic us	2010 Sept	-12	-
8	V Patil	Evaluation of cardiovascular autonomic functions in non-	Biomedicine	2211- 8039	Copernic us	2010		-

		insulin dependent diabetes mellitus.						
9	VPatil	A patient withcomplete heart block for caesarean section.	Anesthesiol ogy clinical pharmacolo gy	0970- 9185	Copernic	2010		-
10	V Patil	Gender-selective interaction between aging and cardiovascular sympathetic activity.	Pravara med. Review	0975- 0533	Copernic us	2010	(2)2	pag e
11	V Patil	Effect of specific "Yogasanas "on cardiovascular autonomic function test.	Pravara med. Review	0975- 0533	Copernic us	2010	(1)-	
12	V Patil	Autonomic function tests during pre and post menstrual phases in young women.	Pravara med. Review	0975- 0533	Copernic us	2011	3	23- 30
13	V Patil	A comparative study of cariovascular sympathetic activity in three trimesters of pregnancy.	Pravara med. Review	0975- 0533	Copernic us	2011	(2)3	19- 23
14	Sunita Nighute	Study of pulmonary function tests amongst smokers & non smokers in rural area of Gujrat	J. of clinical and diagnostic research	0973- 709X	Copernic us	2011 Nov	5(6)	115 1- 115 3
15	Sunita Nighute	Surgical wound infections -A prospective hospital based study.	J. Of clinical & Diagnosic research	0970- 1990	Copernic us	2011	(5)7	136 7- 137 0
16	Kiran Buge	Are we ignoring diabetic, a cross sectional study of diabetic neuropathy	Indian J. of Medical sciences	0019- 5359	Copernic us	2011 May	66	186 - 191
17	Shinde C.L., Sandeep Kadu	Stratuse reconstruction from arm span.	The Antiseptic	0003- 5998	Copernic us	2012 Feb	(2)1 05	91- 92

18	V Patil	Assessment of sympathetic automic function test in hypertensive patients.	Medical Innovatica	2278- 7526	Copernic us	2012 Dec.	1	39- 42
19	Sunita Nighute,	Cardiovascular response to chronic tobaco smoking with reference to Electrocardiogram and blood pressure	Internationa I J. Of Biomedical research	0906- 9033	Copernic us	2012	(6)3	42- 45
20	Sunita Nighute, Maria khatoon	Brainstem Auditory evoked potential in different age groups	Internationa I J. Of Biomedical research	0906- 9033	Copernic us	2012	(11) 3	271 - 276
21	Sunita Nighute, Maria Khatoon	Influence of aging on auditory evoked potential in advanced age group.	Internationa I J. Of Biomedical research	0906- 9033	Copernic us	2012	3	422 - 426
22	Shinde C.L., V.S. Zingade	Structure reconstruction from arm span.	The Antiseptic	0003- 5998	Copernic us	2012 Feb	(1)1 05	91- 92
23	Sunita Nighute	MBL producing pseudomonas in kesarsal medical college	Indian j. of biomedical research	0906- 9033	Copernic us	2012	(5)3	32- 34
24	Gagare D.B., Borade N.G. Adhiya A.N.	Correlation of chromosomal abnormalities in selective male factor infertility with azoospermia and severe oligospermia a prospective study.	The Antiseptic	0003- 5998	Copernic us	2012	(1)1 09	245 - 247
25	Gagare D.B., Borade N.G. Adhiya A.N.	Infertility in western region of India: a cytogenetic study of 112 patients with impaired spermatogenesis.	j. Med Res. Health Sci.	2319- 5886	Copernic us	2012	(27) 1	20- 27
26	Sunita Nighute, Abhijeet awari	Incidence of bactrical meningitis with reference to latex agglutination	J. of recent advances & applied science	0970- 1990	Copernic us	2012	(3)1 5	65- 68
27	Sunita Nighute	Numerical alterations in	J. of Recent advances in	0970- 1990	Copernic us	2013 June	(6)2 8	100

		differential wbc count in chronic smokers	applied science					103
28	Sunita Nighute, Maria khatoon	Effect of gender on brainstem auditory evoked potential	jopurnal of recent advances in applied sciences	0970- 1990	Copernic us	2013	(5)-	13- 117
29	Sunita Nighute,	Intestinal parasitic infection in HIV positive patients in Ahmedabad.	(jraas) J.of recent advances & applied science	0970- 1990	Copernic us	2013	(3)2	82- 84
30	Pratima Khatake	Relation between serum calcium level, Bone Mineral Density and Blood Pressure in Postmenopausal women	Internationa I Journal of Recent Trends in Science And Technology	2277- 2812 2249- 8109	Copernic us	2013	(1)7	86- 88
31	Sivakum ar U. Glad Mahesh	A study on the prevalence of anemia among young adolescent boys and the variations in the two methods of hemoglobin estimation	ANTISEPTIC & HEALTH" PROFESSIO NAL PUBLICATI ONS	1024- 8919	Copernic us	2013 June	(2)1 10	290 - 291
32	Rangrao Bhise, Kanchan Wadekar	Prevalence of amemia in the children of Tribal Ashram schools in Ahmednagar district of Maharashtra:	Internationa I Journal of developmen t and sustainabilit y	2186- 8662	Google Schooler	2013 Feb	2	298 - 305
33	Rangrao Bhise, A.D. Hatekar S.D. Kaundin ya	Blood pressure and pulse rate responses to sustained handgrip Dynamometer test in Rheumatoid Arthritis patients: of Applied - Basic Medical Sciences	Indian J. of applied basic medical sciences	2249-79- 35 0975- 8917	Copernic us	2013	(10) 15	534 - 537
34	V.S Shelke, K.D. Thorat	Effect of Mobile Phone Radiation On Heart Rate Variation In Healthy Volunteers	Research J. of Pharmaceut ical Biological	975 8585	Copernic us	2013 Jan	(2)1	840 - 845

			and chem.					
35	V.S Shelke, K.D. Thorat	Compartive study of gender differences in age associated changes in autonomic nervous system	Research and Review J. of med. And Health Sciences	2319-865	Copernic us	2013 April	2	60- 64
36	Sunita Nighute, S sadawart	Big five personality and academic performance in medical students	J of Evolution of Med. And Dent science.	2278- 4748	Copernic us	2014 April	(28)	444 6- 445 2
37	Kiran Buge	Oxidative stress and antioxidant level in patients with diabetes and diabetes with hypertension	IJOPILS	2320- 0782	Copernic us	2014 Sept.	(1)2	1- 13
38	Pratima Khatake	A Clinical study on serum calcium levels and Bone Mineral aDensity in pre and postmenopausal Indian Womaen	MedPulse – Internationa I Medical Journal	2348- 2516	Copernic us	2014 Jan	(6)1	9- Au g
39	Kiran Buge	Oxidative stress and antioxidant level in patients with diabetes and diabetes with hyperension	IJOPILS	2320- 0782	Copernic us	2014 Sept.	(1)2	110 - 114
40	VS Shelke, AN Badwe, RG Latti	"Effect Of Yogic Breathing(Pranaya m) On Pulmonary Function Tests(PFT) And Visual Reaction Time In Healthy Individuals".	Internationa I Journal Of Biomedical And Advance Research	2229- 3809 (Online); 2455- 0558 (Print)	Copernic us	2015	(4)6	438 - 442
41	Shinde C.L., V.S. Zingade	Study of Zinc levels in semicall plasma and its relationship with semen quality	VIMS Health Science Journal	2456- 4087	Copernic us	2015 june	(4)2	59- 62

42	Sunita Nighute, S Sadavart e	Big five personalities and total peripheral lymphocyte count	Journal of Internationa I Physiology	p-2347- 1506	Copernic us	2015 July	(1)3	103 - 107
43	Sunita Nighute, Maria Khatoon	Corrleation between age gender and brainstem auditory evoked potential	Journal of Internationa I Physiology	p-2347- 1506	Copernic us	2016 Jan	(2)4	15- 19
44	Sunita Nighute, S Sadawar te	Big five personalities and gender difference	Journal ofInternatio nal Physiology	p-2347- 1506	Copernic us	2016 July	(2)4	57- 61
45	Kiran buge	Study of serum MDA serum Vit, Serum Vit. E Levels in patients with diabetes and diabetes with HTN	Journal ofInternatio nal Physiology	p-2347- 1506	Copernic us	2016 Dec.	(6)4	49- 56
46	Kiran Buge	Effect of glycemic status on peripheral nerve conduction in lower limbs in type 2 diabetes mellitus patients	Journal of Internationa I Physiology	2320- 6071	Copernic us	2016	(2)3	150 5- 150 9
47	Kiran buge, Sunita Nighute	Comparative study of visual and auditory reaction time on the basic of gender in first year mediacl students	Journal of Internationa II Physiology	p-2347- 1506	Copernic us	2017 Dec.	(2)5	126 - 130
48	Sunita Nighute, Kiran buge, Sivakum ar	Relation between big five personality and blood groups	Journal of Internationa II Physiology	p-2347- 1506	Copernic us	2017 July	(1)5	126 - 129
49	Sunita Nighute, Kiran Buge	Effect of cigarette smoking on peak expiratory flow rate -short review	Journal of Internationa I Physiology	p-2347- 1506	Review Article	2017 Dec.	(1)1	pag e-3
50	Pratima Khatake	Effect of air pollution on petrol pump workers: A observational study	MedPulse – Internationa I Medical Journal	2550- 7613	Copernic us	2017 Oct.	(3)4	pag e-1

51	Pratima Khatake	A comparative study on parathyroid hormone among premenopausal and postmenopausal women	MedPulse – Internationa I Medical Journaly	2550- 7613	Copernic us	2017 Dec.	(3)4	21- 23
52	Sunita Nighute, Dr. Kiran Buge	Immediate effect of exercise on auditory and visual reaction time in medical students	Journal of Internationa II Physiology	p-2347- 1506	Copernic us	2018 Dec.	(1)6	211 - 215
53	Sivakum ar Uppara, Kiran Buge, Sunita Nighute	Visual reaction time for red and green ccolors in 1st year medical students	Journal of Internationa I Physiology	p-2347- 1506	Copernic us	2018 Jan	(1)6	25- 28
54	Gagare D.B., Borade N.G.	A case control study screening the correlation of chromosomal alterations with male infertility in 180 infertile men from North Maharashtra	Indian J Physiology Pharmacolo gy	0019- 5499	Pub - med,sco pus,Cop ernicus	2018 April	(2)6	458 - 467
55	Gagare D.B., Borade N.G.,	The study of polymorphic chromosomal variants in male infertility.	VIMS Health Science Journal	2456- 4087	Copernic us	2018 June	(2)5	-
56	Rangara o Bhise, Sunita Nighute	Study of audio- visual reaction time in Rheumatoid Arthritis patients	Journal of Internationa II Physiology	2347- 1506	Copernic us	2019 May	(3)7	77- 81
57	Kiran Buge, Sunita Nighute	Comparison of handgrip strength in male and female medical students	Journal of Internationa II Physiology	2347- 1506	Copernic us	2019	(4)7	104 - 106
58	Rangrao Bhise, Kiran Buge, Sivakum ar,	Nerve Conduction Studies of Upper Limbs in Rheumatoid Arthritis Patients: of Innovative	Internationa I journal of innovative research in science, engineering	2319- 8753	DOAG, Google schooler	2020 April	(5)9	138 4- 139 7

	Sunita Nighute	Research in Science, Engineering and Technology	and technology					
59	Kiran Buge, Sunita Nighute	Comparison of handgrip muscle strength in physically exerciser and sedentary group: A cross sectional study	European journal of Molecular and clinical medicine	2515- 8260	scopus, Embase	2020 Dec	7(11	843 8- 844 3
60	Kiran Buge	Histopathological study of non- neoplastic and neoplastic testicular lesions-A retrospective study	Internationa I journal of heath and clinical research	2590- 325X	DOAJ	Oct-20	3(7)	191 - 194
61	Mr U Sivakum ar, Dr Kiran Buge	Assessment of Pulmonary Function Test in Patients with Major Respiratory Illness	European Journal of Molecular & Clinical Medicine (EJMCM)	2515- 8260	scopus, Embase	Jul-20	7(10	463 0- 463 4
62	Kiran Buge	Study of sympathetic and parasympathetic activity in bronchial asthma patinets	European journal and clinical medicine	2515- 8260	scopus, Embase	2020	7(10	455 7- 456 3
63	Kiran Buge, Sunita Nighute	cognitive optimisation or decline?impact analysis of playing video games on cognitive functions of adolescent	European Journal of Molecular & Clinical Medicine (EJMCM)	2515- 8260	scopus, Embase	2020	7(10	462 1- 462 9
64	Siva kumar,ki ran Buge,Bhi se rangrao	A study of pulmonary function test among construction workers	Internationa I journal of health and clinical research	2590- 325X	DOAJ	Jul-21	4(13	
65	Ü. SIVAKU MAR, SUNITA NIGHUT E	Association between Chronic Obstructive Pulmonary Disease and Peripheral Arterial Disease in Construction	pakistan J of medical and health science (P J M H S)	21151- 03473	scopus	Sep-21	15(9	298 9- 299 3

		Workers-A Cross- Sectional Study						
66	Mr. U sivakum ar,	Assessment of Pulmonary Function Test in Patients Having Tuberculosis, Asthma and COPD	European Journal of Molecular & Clinical Medicine (EJMCM	2515- 8260	Embase	,2021	8 (4)	191 7- 192 2
67	U. SIVAKU MAR, SUNITA NIGHUT E	Relation between Chronic Obstructive Pulmonary Disease and Peripheral Arterial Disease among Construction Workers	pakistan J of medical and health science (P J M H S)	21151- 03473	scopus	OCT 2021	15(1 0)	347 3- 347 5
68	U. SIVAKU MAR, SUNITA NIGHUT E	COPD IS ASSOCIATED WITH AN INCREASED RISK OF PERIPHERAL ARTERY DISEASE	Internationa I J of multidisiplin ary educational research	2277- 7881	UGC approve d journol,p ublons	July: 2021	10,7(3),	85- 90
69	Sunita Nighute	A cross-sectional syudy of obesity related indices and its correlation with blood pressure in Medical students	Pravara Med Rev.	0975- 0533	Embase scopus	Sept.2022	14(0 3)	13- 19
70	Kiran Buge	Study of pulmonary function teste and muscle strength in sportmen of tribal region of Guajrat.	Internationa I journal of health Sciences	2520- 6978	scopus	2022	6(S2 )	217 2- 218 2
71	Dr. Kiran Buge1, Aditi Sharma2	Observing Effects of COVID-19 on Pulmonary Function Testing in a Tertiary Care Center	European Journal of Cardiovasc ular Medicine	2042- 4884	Embase scopus	2023	13(1	85- 88

## **STUDENTS PROJECTS**

Sr.	Date	Title	Students	Guide	Project
No.			Name		For
1		Fallen daughter of Eye	Pratiksha	Dr. Sunita	
			Bhansali	Nighute	
2	8.8.2019	Analysis of playing of	Meghna	Dr. Sunita	ICMR
		video cognitive functions	Choudhary	Nighute	
		of adolescents			
3	1.9.2018	Effect of smart phone on	Uday Patil	Dr. Kiran	ICMR
		Audio Reaction time in		Buge	
		Medical students.			
4		Handgrip test in different	Aditi Sharma	Dr. Kiran	ICMR
		phases of menstrual		Buge	
		cycle			
5		Effect of meditation on	Arhama Alam	Dr. Sunita	ICMR
		Autonomic function tests.		Nighute	

## **ONGOING PROJECTS**

- 1) PEFR and post covid positive patients
- 2) Pulmonary function tests in post covid positive patients
- 3) Cardiac output and different postures of body.
- 4) Gas analysis during yoga and meditation.
- 5) Heart rate variability in different types of exercise.
- 6) Pulmonary function tests in construction workers

# **Papers Presented in conferences**

Sr. No.	Name Of Paper		Conferenc	Place of Conferen	Local/State /National/ Internation al	Date/Yea r
1	Variation in the relative length of Y chromosome	Gagare D B	APPI	Banglore	International	2004
2	Study of MDA levels and vitamin E levels in patients with diabetes and diabetes with hypertension	Buge		BJMC and SGH Pune	State	2013.

# **Poster presented in Conferences**

Sr. No	Name Of Poster	Presenter	Name Of Conference	Place Of Conferen ce	Local/State /National/ Internation al	Date/Year
1	Acute effect of tobacco smoking on resting metabolic rate	Dr.sunita nighute	APPI National Conference,	Vishakha patanam	National/	Dec. 2006
2	Effect of Cigarette smoking on total body Oxygen consumption in rural population		International Agricultural Conference,	Aurangab ad	International	2007
3	Study of serum MDA and	Dr.Kiran Buge	1 <sup>st</sup> internatio nal conference on basic and applied physiology	Ahmedab ad	International	2012.
4	Variation in the relative length of human "Y" chromosome	Dr. D. B. Gagare	"Golden Appicon 2004"	Bangalor e	International	19 <sup>th</sup> to 22 <sup>nd</sup> Dec'2004.

# **DEPARTMENTAL ACTIVITY LIST**

S.	Type of	Name of Activity	Date of
N	Activity)		Activity
1	Guest lecture	Problem Based Learning(Dr. Shubhada Gade)	7/09/2014
2	Guest lecture	Endocrine changes in Elderly(Dr Anagha	6/09/2015
	Guest lecture	sahastrabuddhe	0/07/2013
3	Guest lecture	"YOUNG AT HEART" Senior	25/9/2016
		Citizens(Adv. Jaymala Godbole)	
4	Guest lecture	Cardio Respiratory changes in Yoga(Dr.	4/12/2016
		Manish Dhadse)	
5	Guest lecture	Physiology of Aging(Dr. Nirmala Borade)	24/09/2017
6	Guest lecture	Under water Physiology(Dr. Manish Dhadse)	10/12/2018
7	CME	Challenges in Geriatrics and Healthy Aging"	17/02/2019
8	Seminar	Acid Base Balance	31-01-2020
9	Seminar	Micturition Reflex	31-01-2020
10	Chart	Renal function Tests	31-01-2020
	presentation		
11	Seminar	Mech of hormone action	23-01-2020
12	Seminar	synapse	23-01-2020
13	Chart	Erythropoiesis	23-01-2020
	presentation		
14	Seminar	Sensory Tracts	11-02-2020
15	Seminar	Thyroid Hormones	11-02-2020
16	Chart	Endocrine function Tests	13-02-2020
	presentation		
17	Model prep	Counter current mechanism	13-02-2020
	and		
	presentation		
18	Model prep	Dialysis	13-02-2020
	and .		
4.0	presentation		10.00.000
19	Model prep	Effect of radiation on DNA	13-02-2020
	and		
20	presentation		27.02.2321
20	Seminar	Immunity	25-03-2021
21	Seminar	Transport across cell membrane.	25-03-2021

22	Workshop	Training program on Biopic in collaboration with cardiorespiratory depart of	01-04-2021
		physiotherapy college	
23	CME	Physiological aspects of covid	23-07-2021
24	Workshop	Workshop on cardiopulmonary resuscitation	25-4-2022 to
		skill for 1 <sup>st</sup> MBBS students of 2021-22 batch	27-4-2022
25	Model prep and presentation	Phagocytosis	9-6-2022
26	Guest lecture	Research in Exercise Physiology by Dr	2-8-2022
		Badam Khalid	
27	Guest lecture	Study of Design and Achievements by Dr	2-8-2022
		Mitkari Samadhan	
28	Guest lecture	Practical Sessions in physiology by Dr Kiran	6-8-2022
		Buge	
29	Guest lecture	Yoga And Physiology by Dr Kathore Vinod	18-8-2022
30	Guest lecture	Sport Physiology by Dr Kiran Buge	15-9-2022
	Workshop	Basic life support training workshop at Jr	17-9-2022
	_	college, vilad ghat Ahmednagar	
31	Guest lecture	Forever first aid by Dr Sunita Nighute	30-9-2022
32	Guest lecture	Microteaching by Dr Sunita Nighute	28-11-2022
33	Workshop	Workshop on cardiopulmonary resuscitation	9-1-2023 to
	-	skill for 1 <sup>st</sup> MBBS students of 2022-23 batch	11-1-2023
34	Guest lecture	Emergency care & Physiology by Dr Sagar	08-02-2023
		Chavan	
35	Guest lecture	Physiology of ECG by Dr Yogesh Gupta	09-02-2023
36	Social activity	Pulmonary function testing for old age home	20-4-2023
		Ahmednagar	

# **CME/Conferences conducted by the department**

## 1) CME

Topic- "Challenges in Geriatrics and Healthy Aging"

Date-17/02/2019

## 2) CPD (WEBINAR)

TOPIC-"Physiological aspects of covid-19"

Date- 23/07/2021.

# **E-Lectures by the faculty**

Name	Topic	YouTube link
Dr Sunita Nighute	Aetcom lecture on what does it mean to be a patient? 2	https://youtu.be/RM4g09eXVVQ
Dr Sunita Nighute	Aetcom lecture 1.2 module, what does it mean to be a patient?part -1	https://youtu.be/qGmffti2_9k
Dr Sunita Nighute	Cns introduction	https://youtu.be/1kyaxx50PfI
Dr Sunita Nighute	Cns lect on receptor	https://youtu.be/Ld7R4ROoHn4
Dr Sunita Nighute	Cns synapse 1	https://youtu.be/LfFIITU736U
Dr Sunita Nighute	Cns synapse 2	https://youtu.be/K23WAxl5gWk
Dr Sunita Nighute	Cns synapse 3	https://youtu.be/byI11DI2TOA
Dr Sunita Nighute	Cns ascending tract part 1	https://youtu.be/HtlbdyyldWg
Dr Sunita Nighute	Cns ascending tract part 2	https://youtu.be/-VkPs0piJVk
Dr Sunita Nighute	Cns ascending tract part 3	https://youtu.be/zkB8xVU4jKw
Dr Sunita Nighute	Cns sensory cortex	https://youtu.be/U1IEAozdpY4
Dr Sunita Nighute	Cns physiology of pain	https://youtu.be/t216SG4_wsg
Dr Sunita Nighute	Cns central analgesic system	https://youtu.be/t7AUk6ubduM
Dr Sunita Nighute	Cns thalamus	https://youtu.be/8gQzyebx2ic
Dr. Buge	Clinical Examinations of eyes(practical	http://youtu.be/pqjvsg-ecgA
Dr. Buge	Visual Acuity (practical)	http://youtu.be/gSy-7iQvsto
Dr. Buge	Visual Acuity (practical)	http://youtu.be/HrTXjZSyJHY
Dr. Buge	- Color vision	https://youtu.be/Pv0spnKqKq0
Dr.Bhise	ECG Practical(practical)	http://youtu.be/xcVSZnoEV7E
Dr.Bhise	GIT (practical)	https://youtu.be/vLOIKg_5jn8
U.Sivakumar	Peak Expiratory flow rate practical	https://www.youtube.com/watch?v=B XKtYJUJKIk
U.Sivakumar	Perimetry Practical part I	https://www.youtube.com/watch?v=07 lutjF8PA8
U.Sivakumar	Perimetry Practical - II	https://www.youtube.com/watch?v=vd lvwukptPQ
U.Sivakumar	Spirometry Practical	https://www.youtube.com/watch?v=5q hKym_9hmU&t=631s
U.Sivakumar	Demonstration of DLC Part II	https://youtu.be/465PKRTc_wU
U.Sivakumar	Demonstration of DLC Part I	https://youtu.be/OZZ721bMIYo
U.Sivakumar	Differential count II	https://youtu.be/xZEXdY50_pA
U.Sivakumar	Differential leucocyte count	https://youtu.be/bbATk4450SA
U.Sivakumar	RBC Demonstration	https://youtu.be/wRT_cwpqe9E
U.Sivakumar	RBC count Briefing	https://youtu.be/Xh9_fg1L3bA

U.Sivakumar		Calculation	https://youtu.be/OxPaoG3KO7M
U.Sivakumar		WBC Demonstration	https://youtu.be/7VJ6h83e-Pk
U.Sivakuma	ar	WBC Briefing	https://youtu.be/St4mvP2TDkc
Dr. Dnyanesh	Gagare	Introduction to CVS	https://youtu.be/pBeU4PmP-FM
Dr. Dnyanesh	Gagare	Properties of cardiac muscle-1	https://youtu.be/jjcXsVJBL6U
Dr. Dnyanesh	Gagare	Properties of cardiac muscle-2	https://youtu.be/hN3Zs-vgDHs
Dr. Dnyanesh	Gagare	Cardiac Impulse-1	https://youtu.be/XttuSbJef1k
Dr. Dnyanesh	Gagare	Cardiac Impulse-2	https://youtu.be/BfxV30ax6lo
Dr. Dnyanesh	Gagare	ECG-1 Physiology of ECG	https://youtu.be/iUAurRNSws0
Dr. Dnyanesh	Gagare	ECG-2 Procedure of recording	https://youtu.be/KWEB6cJ1kgw
Dr. Dnyanesh	Gagare	ECG-3 Normal ECG	https://youtu.be/JXFbC0h4gnU
Dr. Dnyanesh	Gagare	ECG-4 Cardiac Arrhythmias	https://youtu.be/pFciV3jtR7M
Dr. Dnyanesh	Gagare	Cardiac Cycle-1	https://youtu.be/myeLeKuFHXA
Dr. Dnyanesh	Gagare	Cardiac Cycle-2	https://youtu.be/myeLeKuFHXA
Dr. Dnyanesh	Gagare	Heart sound	https://youtu.be/UDBk_WTjB0
Dr. Dnyanesh	Gagare	Heart rate-1	https://youtu.be/SnRF37uMtll
Dr. Dnyanesh	Gagare	Heart rate-2	https://youtu.be/sgXiJSlp4yM
Dr. Dnyanesh	Gagare	Cardiac output-1	https://youtu.be/Xdu4mOP9871
Dr. Dnyanesh	Gagare	Cardiac output-2	https://youtu.be/duuPpUWat1A
Dr. Dnyanesh	Gagare	Hemodynamics-1	https://youtu.be/yPWzKD1rrUE
Dr. Dnyanesh	Gagare	Hemodynamics-2	https://youtu.be/1G1mDD6g9gk
Dr. Dnyanesh	Gagare	Capillary Circulation-1	https://youtu.be/VwOdXmKuN6E
Dr. Dnyanesh	Gagare	Capillary circulation-2	https://youtu.be/lv9YtMS9-C4
Dr. Dnyanesh	Gagare	Lymphatic system	https://youtu.be/VzZg80pihwk
Dr.	Gagare	Integrated teaching: Sedentary	https://youtu.be/9XL2Rxnmruc

Dnyanesh	Lifestyle	
Dr. Gagare Dnyanesh	Arterial blood pressure-1	https://youtu.be/w6WHcU9-Hr8
Dr. Gagare Dnyanesh	Arterial blood pressure-2	https://youtu.be/18JNrphyqLM
Dr. Gagare Dnyanesh	Arterial blood pressure-3	https://youtu.be/ft2Z20turSs
Dr. Gagare Dnyanesh	Circulatory shock-1	https://youtu.be/fllGWYdMobQ
Dr. Gagare Dnyanesh	Circulatory shock-2	https://youtu.be/Ezkf-mMaxME
Dr. Gagare Dnyanesh	LCD: Properties of cardiac muscle	https://youtu.be/gVc0IBRXt8M
Dr. Gagare Dnyanesh	LCD: Experimental Physiology- Effect of Drugs on Frog's heart	https://youtu.be/9MnTMNDDZfQ
Dr. Gagare Dnyanesh	LCD: Experimental Physiology- Cardiac Graphs	https://youtu.be/GkzA2qF6kYc
Mr. Shinde.C.L	Renal Physiology-Renin- Angiotensin	https://youtu.be/FZdOJi828wg
Mr. Shinde.C.L	Renal Physiology-Nephron	https://youtu.be/gYLbb6yxf6M
Mr. Shinde.C.L	Renal Physiology-Mechanism of urine formation & dilution	https://youtu.be/pQQ77jUuo4E
Mr. Shinde.C.L	Renal Physiology- GFR	https://youtu.be/jOxwls4XAYA
Mr. Shinde.C.L	Renal Physiology-K, Ca. sparing & waster drugs.	https://youtu.be/0CVhGVcltDk
Mr. Shinde.C.L	Renal Physiology-Natriuretic & Diuretics	https://youtu.be/0QIIEu5Fltw
Mr. Shinde.C.L	Human Experiment- Stethography	https://youtu.be/cTVMcIOBqxY
Mr. Shinde.C.L	Human Experiment-Perimetry	https://youtu.be/Oere6NLSJQM
Mr. Shinde.C.L	Human Experiment-CPET	https://youtu.be/i84Q8eryL-s
	CME -physiological aspects of COVID	https://studio.youtube.com/video/oZM OoEXs8cw/comments
	CME -physiological aspects of COVID	https://studio.youtube.com/video/RgT-YiyN4MU/comments
Dr Kiran Buge	Cerebellum3	https://studio.youtube.com/video/RgT -YiyN4MU/comments
Dr Kiran Buge	Cerebellum 2	https://studio.youtube.com/video/LbtH 0Z247FA/comments
Dr Kiran Buge	Cerebellum 1	https://studio.youtube.com/video/Gg5 HqtW4M_E/comments
Dr Kiran Buge	hypothalamus	https://studio.youtube.com/video/sQF DYNU2pVw/comments
Dr Kiran Buge	thalamus	https://studio.youtube.com/video/Vv4 xPyLTSN4/comments

Dr Kiron Bugo	Pagal ganglia 2	https://studio.youtube.com/video/Ywhi
Dr Kiran Buge	Basal ganglia 2	qOuaRfk/comments
Dr Kiron Pugo	Pagal ganglio 1	https://studio.youtube.com/video/fF-
Dr Kiran Buge	Basal ganglia 1	o8yJYAVk/comments
Dr Viron Bugo	Deticular formation	https://studio.youtube.com/video/1LIO
Dr Kiran Buge	Reticular formation	k5IDQBI/comments
Dr Kiran Buge	Extrapyramidal tract	https://studio.youtube.com/video/RHD
Di Kilali buge	Extrapyramidal tract	tl3faiCo/comments
Dr Kiran Buge	Descending tracts	https://studio.youtube.com/video/0Yr1
Di Kilali buge	Descending tracts	uLhLD1M/comments
Dr Kiran Buge	Motor cortex	https://studio.youtube.com/video/eUX
Di Mian buge	Wotor cortex	Ww_Ko2dQ/comments
Dr Kiran Buge	Spinal reflex 2	https://studio.youtube.com/video/qPy
Di Mian bage	Opinal reliex 2	eYRosJhs/comments
Dr Kiran Buge	Spinal reflex 1	https://studio.youtube.com/video/6iIH
Di Mian buge	Spirial reliex 1	VRRhkN4/comments
Dr Kiran Buge	Muscle spindle	https://studio.youtube.com/video/pErz
Di Mian buge	Muscle spiritie	gbDqLWg/comments
Dr Kiran Buge	Pain analgesic system	https://studio.youtube.com/video/_Hn
Di Mian bage		n5r3O45o/comments
Dr Kiran Buge	Anteriolateral spinothalamic	https://studio.youtube.com/video/7uP
Di Mian Bage	tract	DWMlkOyA/comments
Dr Kiran Buge	Ascending tract	https://studio.youtube.com/video/YTR
Bi Mian Bage	7.00cmaing tract	RI5XZwuo/comments
Dr Kiran Buge	receptor	https://studio.youtube.com/video/xmB
Bi Mian Bage	Τσοσρίσι	1Dc0wFYo/comments
Dr Kiran Buge	Properties of synapse	https://studio.youtube.com/video/h3Q
Di Mian Bage	1 Toperties of Synapse	_EZ48mRw/comments
Dr Kiran Buge	Synapse 2	https://studio.youtube.com/video/KmA
Bi Mian Bago	Cyriapoo 2	p-PgTC0A/comments
Dr Kiran Buge	CNS introduction	https://studio.youtube.com/video/Pyzc
2. Man Bago	C. TO IIII OGGOTOTI	RXgc4N0/comments
Dr Kiran Buge	RS practical	https://studio.youtube.com/video/CNN
2. Man Bago	To pradical	k02Bb1vI/comments
Dr Kiran Buge	Visual reflex 1	https://studio.youtube.com/video/BF3
- I man bago	VICEAL TOTION 1	mewdkKkc/comments
Dr Kiran Buge	Visual reflex 1	https://studio.youtube.com/video/HrT
2. ( ( ) 2 ( ) 2 ( )	TIGGGI TOTION T	XjZSyJHY/comments

#### **FUTURE PLAN OF THE DEPARTMENT**

- 1) It will be our effort to bring together disciplines beyond the medical sciences such as the basic scientists and the technologists to establish a world class research facility and program that has a translational potential to improve quality of health care.
- 2) To adapt latest learning innovation teaching strategies.
- 3) To become a center of excellence for training and research in medical physiology in collaboration with physiotherapy and Nursing specialty.
- 4) To establish Autonomic function lab, clinical electro physiology lab, Exercise physiology lab, Genetic Karyotyping lab, Yoga research lab to facilitate the multi-disciplinary patient care.
- 5) Conduct research projects for community mainly school children's in relation to psychological and motor skills.
- 6) To train the community especially college students and non-medical persons for life saving first aid like Cardiopulmonary resuscitation and artificial respiration.

## **OTHER INFORMATION**

#### SOCIAL OUTREACH SERVICES OR PROGRAMS

1) The Physiology department is dedicated to working with local community through our outreach efforts.

We to raise awareness about health & disease

- ➤ By arranging pulmonary function testing like spirometry for old age home vilad Ghat Ahmednagar.
- ➤ Health checkup camp' at Vikhe Patil junior college along with teaching them about human physiology.
- ➤ First aid training programme for students of Vikhe Patil junior college vilad ghat Ahmednagar for training about CPR.
- ➤ To raise the awareness about CPR 1<sup>st</sup> MBBS Students of 2021-22 and 2022-23 batch (400 students) trained their family members and relatives for CPR.So we trained more than 400 families for CPR.
- 2) Arranged health and awareness programme for sex workers in the area around shevgaon, Ahmednagar.

#### **SPECIAL FEATURES OF DEPARTMENT**

- i) Well equipped labs, and demonstration rooms.
- ii) Well qualified faculty and technical staff.
- iii) High standard of teaching & evaluation.
- iv) Innovative methods of teaching like OSPE (objective structural practical examination) and OSCE.
- v) Activity based teaching in the form of model making and presentation.
- vi) Early clinical exposure by arranging visits of UG students to different hospital units.
- vii) Horizontal and Vertical integrated teaching.

## BEST PRACTICES IN THE DEPARTMENT

- ➤ Identification of slow learners and arranging special classes to improve their performance.
- Fast learners are trained for Quiz competition and seminar competition etc.
- ➤ Computer aided teaching and use of videos, animations in regular teaching.
- > Regular conduct of UG seminars as a self-directed learning.
- ➤ Regular conduct of model preparation and presentation by UG students to improve clinical and communication skill.

- ➤ Regular conduct of chart/poster preparation and presentation by UG students to improve clinical and communication skill.
- For early clinical exposure arranging hospital visits in different wards, OPD, ICU and dialysis unit.
- ➤ Arranging integrated teaching programme (Horizontal and Vertical).
- ➤ Problem based learning (Case scenario presentation).
- Motivating the MBBS students for voluntary blood donation & participation in various competitions etc.
- ➤ Collection of University Questions papers from various universities. Students are trained according to the question bank.
- Innovative teaching learning methods like OSCE, OSPE, interview with patients and relatives and its discussion, case presentations.
- Assigning projects to the students to develop sensory and motor skill of the students.
- > Teaching the basic clinical skill to the students by arranging different clinical stations.
- Regular conduct of faculty journal club to enhance latest research updates.
- ➤ Donating academic books to the needy MBBS and Physiotherapy students of Dvvpfs medical college.
- ➤ Regularly collecting the E-feedback from the students regarding Teaching, Learning And evaluation process to improve teaching and learning standard.
- ➤ Role play by the students for AETCOM teaching.

- **E**-lectures of the faculty for the students.
- ➤ Use of Elsevier e-learning software for Animal simulation experiments.
- ➤ Display of latest news regarding physiology on departmental notice board for latest update of physiology.

### **Uniqueness of the Department**

Physiology is the study of the functions of the body .So a strong emphasis is being placed on teaching.

The academic staff is dedicated & experienced and is also committed to performing the best which reflects on the performance of the students, there results, there career, the patients & subsequently the society at large.

The strength of the department of Physiology lies in the outstanding faculty who take pride in the strong commitment to excellence in teaching; as well as in the research work.

For the excellent work in research in physiology one of the faculty members of the department Dr. Sunita Nighute received National level Health care Award – 2018; for research in medical physiology, CIMCON Foundation, Bhopal. And also Life time education achievement award-2019 (National and International compendium) to Dr Kiran Buge (Associate professor physiology)

The department is actively engaged in a range of educational activities starting from classroom teaching to social outreach activities like Health Checkup camps, preparation and presentations of different physiological models and charts as well as seminar presentations by undergraduate students.

In year 2021 April department has added one more feather in the form of Exercise physiology lab.

Very soon department is going to start Neurophysiology lab.

## **Departmental Library Committee**

Sr.No.	Name of staff	Designation	Committee Designation
1.	Dr. Sunita Nighute	Prof & HOD	In-charge
2.	DR Karale DB	Asst. Prof.	Co- Ordinator
3.	Dr. Kiran Buge	. Prof.	Member
4	Dr. DnyaneshGagare	Asso. Prof.	Member
5.	Dr. R. M. Bhise	Asso. Prof.	Member
6.	Dr. Mrs Gandhi N N	Asst. Prof.	Member
7.	Mr. Shinde C.L.	Asst. Prof.	Member
8.	DrDongare P P	Tutor	Member
9.	DrMs.Berad D S	Tutor	Member
10	DrMadane AL	Tutor	Member
11	DrMsKoradkar KG	Tutor	Member

The Committee of following member is constituted for Departmental Library Committee

Above Committee will encourage the students & staff for reading the different books of Library & to update the Library time to time.

## **Departmental Laboratories Committee**

The Committee of following member is constituted for Departmental Laboratories Committee.

Sr.No.	Name of staff	Designation	Committee Designation
1.	Dr. Sunita Nighute	Prof & HOD	In-charge
2.	Dr. R. M. Bhise	Asso. Prof.	Coordinator (clinical)
3.	Dr. Kiran Buge	Prof.	Coordinator (clinical)
4.	DRKaraleDB	Asst. Prof.	Coordinator (Hematology)
5.	Dr. Mrs Gandhi N N	Asst. Prof.	Coordinator (Hematology)
7.	Mr. Shinde C.L.	Asst. Prof.	Coordinator(Researchlab physiology)
8.	Dr. Pravin Dongare	Tutor	Member
9.	Dr. Madane Ashok L	Tutor	Member
10.	Dr.Ms.M.S Shaikh	Tutor	Member
11.	Dr. Mahesh B Late	Tutor	Member

Above Committee will Supervise smooth Conduction of regular Practicals & exams

## **Departmental Curricular Committee**

The Committee of following member is constituted for Curriculum implementation.

Name of staff	Designation	Committee Designation
Dr. Sunita Nighute	Prof & HOD	In-charge
Dr. Kiran Buge	Prof.	Co- Ordinator
Dr. Dnyanesh Gagare	Asso. Prof.	Member
Dr. R. M. Bhise	Asso Prof.	Member
DR Karale DB	Asst. Prof.	Member
Dr. Mrs Gandhi N N	Asst. Prof.	Member
Mr. Shinde C.L.	Asst. Prof.	Member
Dr. Pravin Dongare	Tutor	Member
Dr. Madane Ashok L	Tutor	Member
Dr.Ms.M.S Shaikh	Tutor	Member
Dr. Mahesh B Late	Tutor	Member
	Dr. Sunita Nighute  Dr. Kiran Buge  Dr. Dnyanesh Gagare  Dr. R. M. Bhise  DR Karale DB  Dr. Mrs Gandhi N N  Mr. Shinde C.L.  Dr. Pravin Dongare  Dr. Madane Ashok L  Dr.Ms.M.S Shaikh	Dr. Sunita Nighute Prof & HOD  Dr. Kiran Buge Prof.  Dr. Dnyanesh Gagare Asso. Prof.  Dr. R. M. Bhise Asso Prof.  DR Karale DB Asst. Prof.  Dr. Mrs Gandhi N N Asst. Prof.  Mr. Shinde C.L. Asst. Prof.  Dr. Pravin Dongare Tutor  Dr. Madane Ashok L Tutor  Dr. Ms.M.S Shaikh Tutor

Above Committee will organize & update different curricular activities at departmental level.

## **Departmental Time Table Committee**

The Committee of following member is constituted for Departmental Time- Table Committee

Sr.No.	Name of staff	Designation	Committee Designation
1.	Dr. Sunita Nighute	Prof & HOD	In-charge
2.	. DR Karale DB	Asst. Prof.	Co- Ordinator
3.	Dr. Kiran Buge	Prof.	Member
4.	Dr. Dnyanesh Gagare	Asso. Prof.	Member
5.	Dr. R. M. Bhise	Asso. Prof	Member
6.	Dr. Mrs Gandhi N N	Asst. Prof.	Member
7.	Mr. Shinde C.L.	Asst. Prof.	Member
8.	Dr. Pravin Dongare	Tutor	Member
9.	Dr. Madane Ashok L	Tutor	Member
10.	Dr.Ms.M.S Shaikh	Tutor	Member
11.	Dr. Mahesh B Late	Tutor	Member

Above Committee will Supervise the preparation of weekly time table & its Display on notice board & according management of lectures & Practicals.

### **Committee for Allied Course**

The Committee of following member is constituted for Committee for Allied Course.

Sr.No.	Name of staff	Designation	Committee Designation
1.	Dr. Sunita Nighute	Prof & HOD	In-charge
2.	Mr. Shinde C.L.	Asst. Prof.	Co- Ordinator
3.	Dr. Kiran Buge	Prof.	Member
4.	Dr. Dnyanesh Gagare	Asso. Prof.	Member
5.	Dr. R. M. Bhise	Asso. Prof	Member
6.	Dr. Mrs Gandhi N N	Asst. Prof.	Member
7	. DR Karale DB	Asst. Prof.	Co- Ordinator
8	Dr. Pravin Dongare	Tutor	Member
9	Dr. Madane Ashok L	Tutor	Member
10	Dr.Ms.M.S Shaikh	Tutor	Member
11.	Dr. Mahesh B Late	Tutor	Member

Above Committee will be for Smooth Conduction of lectures , Practicals & exams of B.P. Th & Nursing

## **Departmental Extra curriculum Committee**

The Committee of following member is constituted departmental extra Curriculum Committee.

Sr.No.	Name of staff	Designation	Committee Designation
1.	Dr. Sunita Nighute	Prof & HOD	In-charge
2.	Dr. Dnyanesh Gagare	Asso. Prof.	Co- Ordinator
3.	Dr. Kiran Buge	Prof.	Member
4.	Dr. R. M. Bhise	Asso. Prof	Member
5.	Dr. Mrs Gandhi N N	Asst. Prof.	Member
6.	DR Karale DB	Asst. Prof.	Co- Ordinator
6.	Mr. Shinde C.L.	Asst. Prof.	Member
7.	Dr. Pravin Dongare	Tutor	Member
8.	Dr. Madane Ashok L	Tutor	Member
9.	Dr.Ms.M.S Shaikh	Tutor	Member
10.	Dr. Mahesh B Late	Tutor	Member

Above Committee will encourage the students for extracurricular activities.

### **LIBRARY CONTENTS**

- 1) Total Number of Books 122
  - a) Theory Books 113
  - b) Practical Books 9
- 2) Journals
- a) National –Indian Jr.of Physiology & Pharmacology
- b) International
- 3) Academic CDs
- a)Nervous system I and II
- b) Respiratory System
- c) Cardiovascular System
- d) Muscular System
- e) Urinary System
- f) Fluid electrolyte & acid/balance
- 4) E- Library:
- a) E Books Physiology, Anatomy, Medicine
- b) Question Bank (MCQ's, LAQ's and SAQ's)
- c) Academic videos
- d) Lecture ppts of Departmental faculties
- e)Lecture videos, Practical videos

#### LIBRARY RECORD REGISTERS

- a) Library books issue and return record register
- b) Books recommended and received to library record register
- c) Journal club and seminar register

### **HEMATOLOGY LABORATORY EQUIPMENT AND INSTRUMENT'S**

S.No	Particulars	Qty.	MAINTAINANCE
01	Hemoglobinometer	64	
02	Hemocytometer	61	
03	Microscopes	60	Half Yearly By Maintenance Dept.
04	Binocular Microscope	01	Half Yearly By Maintenance Dept.
05	Centrifuge Machine	01	
06	Westergrens Tubes	35	
07	Wintrobes Tubes	04	
08	Stop Watch	05	
09	Needle cutter and burner	02	

# **Chemicals**

Sr.No	Chemicals
1.	WBC Diluting fluid
2.	RBC Diluting fluid
3.	N/10 HCL
4.	Leishman's Stain
5.	Eosinophil Diluting fluid
6.	Reticulocyte oil fluid
7.	Blood grouping Antisera

### **HEMATOLOGY LAB RECORD REGISTERS**

1) Instrument issue and return record.
2) Instrument breakage policy and record.
3) Total no of instruments, charts and Instrument maintenance record.
4) Other departmental faculty visiting to lab record.
5) Lab infrastructure maintenance record.

# **HEMATOLOGY LAB TIME TABLE**

Course: M.B.B.S

Sr. No.	Day	Time	Batch
1	Monday	3 – 5 pm	В
2	Tuesday	3 – 5 pm	С
2	Wednesday	3 – 5 pm	Α

Course: B.P.Th

Sr. No.	Day	Time	Batch
1	Friday	2 – 4 pm	Α
2	Saturday	11 – 1 pm	Α

# **Clinical Laboratory Instruments**

Sr. No.	Particulars	Quantity	MAINTAINANCE
01	Knee Hammer	40	
02	Spirometers	10	
03	Perimeters	12	
04	Mosso's Ergograph	10	
05	Stethograph	16	
06	Marey's Tambour	10	
07	Sphygmomanometers	28	Half Yearly By Maintainance Dept.
80	Stethoscopes	22	Half Yearly By Maintainance Dept.
09	ECG Machine	01	Half Yearly By Maintainance Dept.
10	Handgrip Dynamometer	02	
11	Weighing Machine	01	
12	Charts for Testing Vision	03	
13	Ishihara's Chart	02	
14	Compass Aesthesiometer	06	
15	Wright's Mini Peak flow Meter	01	Half Yearly By Maintainance Dept.
16	Bicycle Ergograph	03	Half Yearly By Maintainance Dept.
17	Clinical Thermometer	60	
18	Tuning Fork	25	
19	Plain Charts	13	

20	3D Charts	04	
21	Scientist Photograph	13	
22	Laminated Charts	11	
23	Examination Table	12	
24	Models prepared by students	8	3D models prepared by students
25	Organ specimens	5	
26	X-ray view box	1	
27	X-ray films- a) normal chest xray b) mediastinum shifting c) cardiomegaly d) Emphysema e) plural effusion f) pnumothoraax g) barium meal x ray h) MRI brain	8	
28	Photographes of clinical cases a) Hypothyroidism b) cushing syndrome c) Hyperthyroidism d) acromegaly e)Addisons diseases f) facial palsy d) Tetany e) parkinsonism f) squient.	10	
29)	Clinical videos to shows the signs and ssymptoms	10	

### 5) Clinical lab record registers

- 1) Instrument issue and return record.
- 2) Instrument breakage policy and record.
- 3) Total no of instruments, charts, models and specimen record.
- 4) Other departmental faculty visiting to lab record.
- 5) Instrument maintenance record.
- 6) Sick room record.
- 7) Lab infrastructure maintenance record.

### **Clinical Lab Time Table**

Course: MBBS (2021 - 2022)

Sr. No.	Day	Time	Batch
1	Monday	3 – 5 pm	Α
2	Tuesday	3 – 5 pm	В
2	Wednesday	3 – 5 pm	С

Course: B.P.Th (2021 – 2022)

Sr. No.	Day	Time	Batch
1	Friday	2 – 4 pm	Α
2	Saturday	11 – 1 pm	Α

# **REASEARCH LABORATORY Instruments**

Biopac (4 channel)-		
- Cardiac output		
-Nerve conduction velocity		
-Heart Rate variability		
-Temperature		
-Respiratory gas analysis		
-Auditory and visual evoked potential		
-Electromyogram(EMG)		
-Electroencephalogram(EEG)		
Physiogaph single channel		
Reaction time Instrument		
Hand Dynamometer		
BMR Apparatus		
Digital Spirometer		
PEFR Flow meter		
Electrocardiogram (ECG) machine		

# Glimpses of the department

Pulmonary function testing in old age home Ahmednagar





**♣** Dr Sunita Nighute (HOD) Selected as BOS member preclinical subjects by MUHS Nasik









**4** MAIER AWARD 2020- Dr Sunita Nighute HOD Physiology



### **4** Basic life support training workshop at Jr College, vilad ghat Ahmednagar





### **Basic life support training by 1st MBBS students for their family members**







#### **WORKSHOPS AND TRANING PROGRAMME**

**Workshop on cardiopulmonary resuscitation skill for 1**st MBBS students(2021-22 batch)





**Workshop on cardio pulmonary resuscitation skill for 1st MBBS students(2022-23 batch)** 





**♣** Workshop on blood collection skill for 1st MBBS students(2022-23 batch)





**Biopac traning programme in collaboration with Physiotherapy College** 



**♣** Dr Anjali Shete madams visit to department of physiology



**Faculty JOURNAL CLUB** 







### **4** Model prep and presentation by UG students

### **Topic-Phagocytosis**



Topic-counter current mechanism



**Topic- Cell Membrane** 

Topic-Dilysis unit



Topic-effect of radiation on DNA



## **Chart preparation and presentation by ug students**

#### -Endocrine function tests



Topic-Erytropoiesis



-Renal function tests



Seminar Presentation Topic-Hormone action



Seminar presentation Topic- Sensory tracts



#### **Guest Lectures**

### Research in Exercise Physiology by Dr.Khaled Badaam



#### Study of Design by Dr.S Mitkari



Practical Session-by Dr.Kiran Buge for students of physiotherapy at wagholi pune.



Physiology of E.C.G by Dr. Yogesh Gupta



Emergency Care &Physiology by Dr sagar Chavan



Yoga And Physiology" Dr.Vinod Kathore



### Sport Physiology"by Dr.Kiran Buge

#### for students of PIMS loni



## forever first aid by Dr.Sunita Nighute



### MET Physiotherapy - Microteaching "Dr.Sunita Nighute



#### MET Physiotherapy - Microteaching YOUNG AT HEART "Senior Citizens Adv. J Godbole



#### Physiology of Aging-Dr. Nirmala Borade





Cardiorespiratory changes in yoga -Dr. Manish Dhadse

CME CONDUCTED BY DEPARTMENT

♣ CME On Challenges in Geriatrics



**♣** CME on Physiological aspects of COVID



# **Innovative teaching**





### **QUIZE COMPETITION PARTICIPATION BY STUDENTS**





Model Presentation at Vasantrao pawar medical college at Nashik



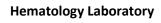


# **DEPARTMENTAL LABORATORY**

### **Clinical Laboratory**



Research Laboratory





Amphibian laboratory





### **Social Out-reach Activity**

### Junior College students Health checkup



FALLEN DAUGHTER OF EVE"





