The driving force behind the challenging and future medical technology

Sri. A C Shanmugam, B.A, L.L.B
RAJARAJESWARI MEDICAL COLLEGE & HOSPITAL, BANGALORE

DEPARTMENT OF PHYSIOLOGY

Welcomes

NAAC PEER TEAM
Quality Policy

• We at RRMCH are committed –
• To provide Quality Allopathic Medical Education and Advanced Health Care services as per customers needs and expectations to achieve highest customer satisfaction.
• By this we would like to be recognised as most preferred destination for quality education and health care services in South India region.
• We will achieve this goal by continuing improvement of quality management system

Date: 01-07-2013                        Medical Director
VISION:

• Our vision is to equip the students with scientific knowledge of the subject, so that students can pursue their careers with a scientific attitude and become dedicated, competent doctors with strong commitment to Hippocratic Oath.
MISSION:

• The sound knowledge of the subject helps students, to correlate between normal functioning of human body and changes occurring in functions during diseases. In clinical practice this helps to understand diagnosis and planning treatment. These analytical skills help students to develop themselves into skilled doctors.
GOAL:

• The broad goal of teaching the subject to undergraduate students is to provide comprehensive knowledge of normal functions of the organ systems of the body to facilitate an understanding of the pathophysiological basis of disease.
OBJECTIVE:

• At the end of the course, the student will be able to;
  • Explain the normal functioning of all the organ systems and their interactions for well co-ordinate body function.
  • Assess the relative contribution of each organ system towards maintenance of milieu interior
  • List the physiological principles underlying the pathogenesis and treatment of disease.
• Name of the Department – PHYSIOLOGY

• Year of establishment - 2005
Names of programs offered -

- MBBS
- BDS
- Nursing
- Paramedical
- MD (Physiology)
- MDS
- PhD
Interdisciplinary programs and departments involved -

- **Integrated teaching programmes with departments of Anatomy, Biochemistry, Anesthesia and Medicine.**
Examination System:

• Annual
• Participation of the department in the courses offered by other departments. Participating in basic postgraduate teaching programs of all department

Yes
Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

<table>
<thead>
<tr>
<th></th>
<th>Sanctioned</th>
<th>Filled</th>
<th>Actual (including CAS &amp; MPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>1</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Associate Professor/Reader</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

* Excess professor shown as Associate Professor
<table>
<thead>
<tr>
<th></th>
<th>Sanctioned</th>
<th>Filled</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Tutor / Clinical Instructor</td>
<td>4</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>
Dr. D.L. Ramachandra

- Qualification: **MBBS, MD**
- Designation: **Prof. & Medical Director**
- Specialisation: **Physiology**
- Experience: **35 Years**
Dr. Ranganath .M.D

- Qualification: **MBBS, MD**
- Designation: **Prof. & HOD**
- Specialisation: **Physiology**
- Experience: **33 Years**
Dr. Mary Prem Jayarajan

- Qualification: MBBS, MD
- Designation: Professor
- Specialisation: Physiology
- Experience: 33 Years
Dr. Prashanth Kumar M

- Qualification: **MBBS, MD**
- Designation: **Professor**
- Specialisation: **Physiology**
- Experience: **16 Years**
Dr. Jamuna B.L

- Qualification: MBBS, MD
- Designation: Associate Professor
- Specialisation: Physiology
- Experience: 9 Years
Dr. Priyanka Singh

- Qualification: **MBBS, MD**
- Designation: **Assistant Professor**
- Specialisation: **Physiology**
- Experience: **4 Years**
Dr. Yogesh M.K

- Qualification: MBBS, MD
- Designation: Assistant Professor
- Specialisation: Physiology
- Experience: 3.5 Years
Mrs. Nishitha Mendonca

- Qualification: M.Sc (Non Medical)
- Designation: Assistant Professor
- Specialisation: Physiology
- Experience: 3 Years
Dr. Shobhana Sahjananda

- Qualification: MBBS
- Designation: Tutor
- Specialisation: Physiology
- Experience: 3 Years
Dr. Gopi Kumar M.S

- Qualification: MBBS
- Designation: Tutor
- Specialisation: Physiology
- Experience: 2.5 Years
Dr. Rekha K. N

- Qualification: **MBBS**
- Designation: **Tutor**
- Specialisation: **Physiology**
- Experience: **2.5 Years**
Dr. Neelkanth Kote

- Qualification: MBBS
- Designation: Tutor
- Specialisation: Physiology
- Experience: 2 Years
<table>
<thead>
<tr>
<th>Name</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. D.L. Ramachandra</td>
<td>MBBS MD</td>
<td>Medical Director, Prof</td>
<td>Physiology</td>
<td>35</td>
</tr>
<tr>
<td>Dr. Ranganath M.D</td>
<td>MBBS MD</td>
<td>Prof &amp; HOD</td>
<td>Physiology</td>
<td>33</td>
</tr>
<tr>
<td>Dr. Mary Prem Jayarajan</td>
<td>MBBS MD, DNB</td>
<td>Professor</td>
<td>Physiology</td>
<td>33</td>
</tr>
<tr>
<td>Dr Prashanth Kumar M</td>
<td>MBBS MD</td>
<td>Professor</td>
<td>Physiology</td>
<td>16</td>
</tr>
<tr>
<td>Name</td>
<td>Qualification</td>
<td>Designation</td>
<td>Specialization</td>
<td>No. of Years of Experience</td>
</tr>
<tr>
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</tr>
<tr>
<td>Dr. Jamuna B.L.</td>
<td>M BBS M D</td>
<td>Associate Professor</td>
<td>Physiology</td>
<td>9 Yrs 7 Months</td>
</tr>
<tr>
<td>Name</td>
<td>Qualification</td>
<td>Designation</td>
<td>Specialization</td>
<td>No. of Years of Experience</td>
</tr>
<tr>
<td>---------------------</td>
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<td>---------------------------</td>
</tr>
<tr>
<td>Dr. Priyanka Singh</td>
<td>MBBS MD</td>
<td>Assistant Prof.</td>
<td>Physiology</td>
<td>04</td>
</tr>
<tr>
<td>Dr. Yogesh M K</td>
<td>MBBS MD</td>
<td>Assistant Prof.</td>
<td>Physiology</td>
<td>3.5</td>
</tr>
<tr>
<td>Ms. Nishitha Mendonca</td>
<td>M.Sc</td>
<td>Assistant Prof.</td>
<td>Physiology</td>
<td>03</td>
</tr>
<tr>
<td>Name</td>
<td>Qualification</td>
<td>Designation</td>
<td>Specialization</td>
<td>No. of Years of Experience</td>
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<tr>
<td>--------------------------</td>
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<td>----------------------------</td>
</tr>
<tr>
<td>Dr. Shobhana Sahajanand</td>
<td>MBBS</td>
<td>Tutor</td>
<td>Physiology</td>
<td>3</td>
</tr>
<tr>
<td>Dr. Gopikumar M.S</td>
<td>MBBS</td>
<td>Tutor</td>
<td>Physiology</td>
<td>2.5</td>
</tr>
<tr>
<td>Dr. Rekha K.N</td>
<td>MBBS</td>
<td>Tutor</td>
<td>Physiology</td>
<td>2.5</td>
</tr>
<tr>
<td>Dr. Neelkanth Kote</td>
<td>MBBS</td>
<td>Tutor</td>
<td>Physiology</td>
<td>2</td>
</tr>
</tbody>
</table>
List of senior Visiting Fellows, adjunct faculty, emeritus professors -

• **Dr. Vasanth A Kulkarni**

Percentage of classes taken by temporary faculty – program-wise information -

• **5%**
Program-wise Student Teacher Ratio –

- **MBBS** - 10:1
- **BDS** - 33:1
- **MD** - 1:1
Number of academic support staff (technical) and administrative staff:

**Technician – 1**

**Computer Operator – 1**

**Attenders - 2**
Non Teaching Staff with HOD
Research facility / centre with state recognition/national recognition/international recognition

- Institute of Chest Disease
- Aerospace Lab
- Jayadeva Institute of Cardiology
- Kidwai Institute of Oncology
- NIMHANS
Hematology Equipments
Human Lab Equipments
Stress Testing Equipment
Autonomic Function Testing
Hematology Lab
Evoked Potential Lab
Publications:

Number of papers published in peer reviewed journals (national / international)

- **International** – 11
- **National** - 09
Faculty serving in
a) National committees
b) International committees
c) Editorial Boards

- Dr. D.L. Ramachandra
- Dr. Vasanth A Kulkarni
- Dr. Jamuna B.L
Faculty recharging strategies - staff members undergone medical educational training at FAIMER / NTTC / inhouse / Regional center

- Dr. D.L. Ramachandra
- Dr. Ranganath M D
- Dr. Mary Prem Jayarajan
- Dr. Prashanth Kumar M
- Dr. Jamuna B L
- Dr. Yogesh M K
- Mrs. Nishitha Mendonca
Student projects

percentage of students who have taken up in-house projects including inter-departmental projects

• 15%
Doctoral / post doctoral fellows

• Dr. D.L. Ramachandra  
  – PG Diploma in Diabetology

• Dr. Prashanth Kumar M  
  – PG Diploma in Diabetology
Seminars/Conferences/Workshops organized (national/international) with details of outstanding participants

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nov, 2011</td>
<td>Yoga and Physiology</td>
<td>Dr. Vasant A Kulkarni</td>
</tr>
<tr>
<td>2</td>
<td>April, 2012</td>
<td>What is Normal in Physiology?</td>
<td>Dr. Mario Vaz</td>
</tr>
<tr>
<td>3</td>
<td>June 18th, 2013</td>
<td>Innovative methods in teaching and learning of medical practice, a lab tutor programme</td>
<td>Mr. Jaya kumar</td>
</tr>
</tbody>
</table>
Code of ethics for research followed by the department

• As per the recommendations of the institutional ethical committee.
## Student profile program-wise:

<table>
<thead>
<tr>
<th>Name of the Program (refer to question no. 4)</th>
<th>Applications received</th>
<th>Selected Male</th>
<th>Female</th>
<th>Pass percentage Male Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBS</td>
<td></td>
<td>57</td>
<td>93</td>
<td>Appearing for exams</td>
</tr>
<tr>
<td>MD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINAL YEAR</td>
<td></td>
<td>1</td>
<td>1</td>
<td>Yet to appear for exam</td>
</tr>
<tr>
<td>2ND YEAR</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1ST YEAR</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
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</tbody>
</table>
Diversity of students

<table>
<thead>
<tr>
<th>Name of the Program (refer to question no. 4)</th>
<th>% of students from the same university</th>
<th>% of students from other universities within the State</th>
<th>% of students from universities outside the state</th>
<th>% of students from other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBS (2013-14)</td>
<td>58.6%</td>
<td>41.3%</td>
<td>0.05%</td>
<td>Nil</td>
</tr>
</tbody>
</table>
• 3 students have cleared USMLE

• 1 PG student of department of Physiology has cleared IELTS
## Student progression

<table>
<thead>
<tr>
<th>Student progression</th>
<th>Percentage against enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG to PG</td>
<td>2 UG’s of our college have joined our M.D programme</td>
</tr>
<tr>
<td>PG to M.Phil, DM / M Ch / DNB</td>
<td></td>
</tr>
<tr>
<td>PG to Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Ph.D. to Post-Doctoral</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td></td>
</tr>
<tr>
<td>• Campus selection</td>
<td></td>
</tr>
<tr>
<td>• Other than campus recruitment</td>
<td></td>
</tr>
<tr>
<td>• Entrepreneurs</td>
<td></td>
</tr>
</tbody>
</table>
## Diversity of staff

<table>
<thead>
<tr>
<th>Percentage of faculty who are graduates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>of the same university</td>
<td>20</td>
</tr>
<tr>
<td>from other universities within the State</td>
<td>75</td>
</tr>
<tr>
<td>from universities from other States</td>
<td>5</td>
</tr>
<tr>
<td>from universities outside the country</td>
<td>NIL</td>
</tr>
</tbody>
</table>
Departmental infrastructural facilities

a) Library - 190 books in departmental library
   Journals: National (5), International (3), e-journals (2)

b) Internet facilities for staff and students
   Campus is Wi-Fi enabled

c) Total number of class rooms
   Four

e) Research laboratories
   One
### Students’ laboratories

#### Five

<table>
<thead>
<tr>
<th>Accomodation</th>
<th>Amphibian</th>
<th>Mammalian</th>
<th>Haematology</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (Sqm)</td>
<td>200</td>
<td>80</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Capacity (seats)</td>
<td>90</td>
<td>45</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>
Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology.

- As per academic curriculum and syllabus of RGUHS
- Active Mentorship programme
- By regular alumni and departmental meetings
Student feedback programme

- Yes, by routine periodic assessment as prescribed by RGUHS
Details of student enrichment programs (special lectures / workshops / seminar) involving external experts.

Visit to

• Sanitorium
• Aerospace Lab
• Jayadeva Institute of Cardiology
• Kidwai Institute of Oncology
• NIMHANS
List the teaching methods adopted by the faculty for different programs including clinical teaching.

- Lectures
- Interactive CD sessions
- Tutorials
- UG Seminars
- Hematology Practical experiments
- Clinical Examination Practicals
How does the department ensure that program objectives are constantly met and learning outcomes are monitored?

- CPA cards
- By regular assessment tests
- Interactive sessions
- Checking log books
- Checking practical manuals
- Internal assessment
- Assignments
- Integrated teaching programme
Participation of students and faculty in extension activities.

- Blood donation camps
- Tobacco awareness programmes
- Sports activities
- Quiz
- Inter college festivals
Details of “beyond syllabus scholarly activities” of the department.

• Quiz programme
• Participation in intercollegiate programmes
Program/ department accredited/ graded by other agencies

- ISO 9001:2008 – Yes
The contributions of the department in generating new knowledge, basic or applied.

• By conducting interactive sessions in simulated mammalian and amphibian experiments
Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths –

• The department has full fledged qualified & dedicated faculty (computer savvy) who cater to the teaching of the following courses:
• We have a very well planned time table in place which is adhered to regularly.
• Regular tutorials, student seminars are being held for better academic performance.
• Counseling & Mentorship programmes are held regularly & corrective actions taken as & when required.
• Special classes are being conducted for under performers.
• In addition to the curriculum, value added courses, enrichment classes & CPA cards are being administered regularly to improve the academic performance of the students.
Weaknesses –

• Good governance system, timely & corrective actions by the appropriate committees have ensured that improvement is a continuous process thereby eliminating all weakness from the system.
Opportunities –

• The visit by a team from the Sultanate of Oman has inspired us to look at it as an opportunity to expand our horizon of teaching beyond the borders of India.

• MOU with Adelaide and Melbourne university in offing.
Challenges –

We look forward to the challenges ahead with a view of:

• To provide quality education & research at cost effective level

• To meet excellence in service to the end users i.e the students & patients in particular & to the society in general.
Future plans of the department.

- In advance research and development programmes
- Research in the field of stem cell technology
- Genetic engineering
- National nutrition programmes
- Nano technology
Thank you