BIOCHEMISTRY DEPARTMENT

Welcomes
NAAC PEER TEAM
Dr H.V. Shetty. M.D, F.I.A.M.S,

Professor & HOD, Biochemistry
BIOCHEMISTRY DEPARTMENT
We at “RR Medical College and Hospital” are committed
To provide Quality Allopathic Medical Education and advanced health care services as per customer’s needs & expectations to achieve highest customer satisfaction.
By this we would like to be recognized as most preferred destination for Quality Education and Healthcare Services in the South India Region.
We will achieve this goal by continual improvement of the Quality Management System.

Date: 01-07-2013 Medical Director
VISION, MISSION, GOAL & OBJECTIVES

VISION:
• The Department of Biochemistry is committed to education, research, patient care, and training UG and PG students to acquire an in-depth knowledge of the fundamental principles of the subject of Biochemistry.
• So that he/she can apply this knowledge, for understanding the basis of health and disease.

MISSION:
• To enable students to understand the scientific basis of life processes at the molecular level and orient them towards the application of knowledge acquired in solving clinical problems.
• To acquire basic practical skills for biochemical investigations in order to support clinical diagnosis of common disorders in the community, and
• To promote research activities for students and staff.
GOAL

The goal of teaching biochemistry including molecular biology to undergraduate and postgraduate students is to make them understand the scientific basis of the life processes at molecular level and orient them towards the application of knowledge acquired in solving clinical problems.
OBJECTIVES

1. To train the undergraduate and postgraduate medical students as per the university guidelines.
2. To encourage the staff to update the recent biochemical concepts and engage in research activities.
3. To conduct journal club, clinical case discussion for postgraduate students.
4. To conduct seminars, guest lectures and CME to impart the interdisciplinary nature of Biochemistry.
5. To provide quality clinical chemistry laboratory services.
HISTORY OF THE DEPARTMENT

UNDERGRADUATE COURSE  -  M.B.B.S.(2005)
                      BDS (1992)
                      BSc Nursing

POST GRADUATE COURSE  -  M.D.(BI OCHEMI STRY)2011
                      MDS

DI PLOMA COURSES     -  DMLT, CETIFI CATE COURSE FOR
                      OT TECHNI CI ANS
### Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

<table>
<thead>
<tr>
<th>Name of faculty</th>
<th>Sanctioned</th>
<th>Filled</th>
<th>Actual (including CAS &amp; MPS)</th>
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</thead>
<tbody>
<tr>
<td>Professor</td>
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<td>03</td>
<td>03</td>
</tr>
<tr>
<td>Associate Professor/Reader</td>
<td>01</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>02</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>Lecturer</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tutor/Clinical Instructor</td>
<td>04</td>
<td>09</td>
<td>09</td>
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<tr>
<td>Senior Resident</td>
<td>-</td>
<td>-</td>
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## Faculty profile - adequacy and competency of faculty

<table>
<thead>
<tr>
<th>Name of faculty</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Yrs of Experience</th>
<th>Research Guidance</th>
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<tbody>
<tr>
<td>Dr. H.V. Shetty</td>
<td>MD Biochemistry</td>
<td>Prof &amp; HOD</td>
<td>MD Biochemistry</td>
<td>32 years 1 mths</td>
<td>10 yrs</td>
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<tr>
<td>Dr. S.M.R. Usha</td>
<td>MD Biochemistry</td>
<td>Professor</td>
<td>MD Biochemistry</td>
<td>15 years</td>
<td>3 yrs</td>
</tr>
<tr>
<td>Dr. K.S. Priyadarshini</td>
<td>MD Biochemistry</td>
<td>Professor</td>
<td>MD Biochemistry</td>
<td>10 years 2 yrs</td>
<td></td>
</tr>
<tr>
<td>Dr. C.M. Bindu</td>
<td>MD Biochemistry</td>
<td>Assoc. Professor</td>
<td>MD Biochemistry</td>
<td>8 years</td>
<td></td>
</tr>
<tr>
<td>Dr. N. Chandrika</td>
<td>MD Biochemistry</td>
<td>Assist. Professor</td>
<td>MD Biochemistry</td>
<td>3 years 2 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. Deepti Gupta</td>
<td>MSc, PhD Med Biochem</td>
<td>Assist. Professor</td>
<td>MSc, PhD Medical Biochem</td>
<td>4 years 6 mths</td>
<td></td>
</tr>
<tr>
<td>Ms. H.G. Sowrabhi</td>
<td>MSc. Medical Biochemistry</td>
<td>Assist. Professor</td>
<td>MSc. Medical Biochemistry</td>
<td>3 years 3 mths</td>
<td></td>
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<tr>
<td>Dr. R. Reena</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>2 years 6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. K.S. Manjula</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>2 years 6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. M. Deepa</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>1 year 6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. V. Mamatha</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>1 year 6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. Manjula H S</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. Vijayalakshmi P</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. Varsha Mohan</td>
<td>M.B.B.S</td>
<td>Tutor</td>
<td>M.B.B.S</td>
<td>6 mths</td>
<td></td>
</tr>
<tr>
<td>Dr. Victoria</td>
<td>M.R.B.S</td>
<td>Tutor</td>
<td>M.R.B.S</td>
<td>6 mths</td>
<td></td>
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</table>
## Diversity of staff

<table>
<thead>
<tr>
<th>Percentage of faculty who are graduates of the same university</th>
<th>Percentage of faculty who are graduates from other universities within the State</th>
<th>Percentage of faculty who are graduates from universities from other States</th>
<th>Percentage of faculty who are graduates from universities outside the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 %</td>
<td>14 %</td>
<td>29 %</td>
<td>Nil</td>
</tr>
</tbody>
</table>
ACHIEVEMENTS OF THE FACULTY

DR H.V. SHETTY, M.D., PROFESSOR AND HEAD.

- MEMBER OF THE BOARD OF STUDIES FOR POSTGRADUATES OF R.G.U.H.S, BANGALORE.
- PANEL MEMBER, SYLLABUS FOR M.D., BIOCHEMISTRY, R.G.U.H.S, BANGALORE.
- EXAMINER FOR M.B.B.S, B.D.S., M.Sc, AND M.D., BIOCHEMISTRY.
- WORKED AS L.I.C. MEMBER FOR STARTING PhD, COURSES AT FATHER MULLER MEDICAL COLLEGE, MANGALORE BY R.G.U.H.S.
- LIFE MEMBER OF MEDICAL BIOCHEMISTS OF INDIA, IMA, ACBI AND ORGANISI NG MEMBER OF ACBI CON 2004 CONFERENCE BANGALORE.
- SET THE UNIVERSITY QUESTIONS PAPERS FOR UNDERGRADUATES AND POSTGRADUATES.
- PG GUIDE FOR 4 M.D., BIOCHEMISTRY STUDENTS AT SRI DEVARAJ URS MEDICAL COLLEGE, KOLAR & NOW GUIDING 3 STUDENTS.
- CHAI RED SCI ENTI FI C SESSI ONS I N I NTERNATI ONAL COFERENCE
Dr. S.M.R. USHA M.D., PROFESSOR OF BIOCHEMISTRY

- Member of Medical Biochemists of India, IMA.
- Examiner for M.B.B.S, B.D.S., of RGUHS & other universities.
- Trained in laboratory quality management & internal audit.
- Actively involved in research activities.
- Attended CMEs programmes in various institutions.
- Approved guide for PG students.
- Chaired scientific session in international conference.
Dr K.S.PRIYADARSHINI M.D., PROFESSOR OF BIOCHEMISTRY

- EXAMINER FOR M.B.B.S, and B.D.S., OF RGUHS & OTHER MEDICAL UNIVERSITIES.
- ACTIVELY INVOLVED IN RESEARCH ACTIVITIES.
- PARTICIPATED IN TRAINING OF TRAINERS WORKSHOP AT RRMC & H, BANGALORE.
- APPROVED GUIDE FOR PG STUDENTS
- CHAIRED SCIENTIFIC SESSION IN INTERNATIONAL CONFERENCE
Dr. C.M. BINDU M.D., ASSOCIATE PROFESSOR OF BIOCHEMISTRY

- Examiner for M.B.B.S, and B.D.S., of RGUHS & other medical universities.
- Actively involved in research activities.
- Participated in training of trainers workshop at RRMC & H, Bangalore.
- Chaired scientific sessions in international conference.
Dr. CHANDRIKA M.D; ASSISTANT PROFESSOR OF BIOCHEMISTRY

- ACTIVELY INVOLVED IN RESEARCH WORK
- MEMBER OF AMBI CON, KARNATAKA CHAPTER
- COMPARATIVE STUDY OF SERUM FERRITIN LEVELS AFTER ORAL SUPPLEMENTATION WITH FERROUS SULPHATE AND CARBONYL IRON IN MILD IRON DEFICIENCY ANEMIA IN PREGNANCY -

This is published in International journal of Biological and Chemical Sciences. 4(2): 362-370, April 2010

- FIRST RANK IN M.D, BIOCHEMISTRY
Dr. DEEPTI GUPTA, PhD; (Med. Biochemistry)
ASSISTANT PROFESSOR OF BIOCHEMISTRY

- ACTIVELY INVOLVED IN RESEARCH WORK
- LIFE MEMBER OF ASSOCIATION OF CLINICAL BIOCHEMIST OF INDIA

Study of Lipid Profile, Copper, Ceruloplasmin & ascorbic acid in patients with thyroid Dysfunction

Awarded best Poster at ACBI CON Patna 2005
MISS SOWRABHI, M.Sc; (Med. Biochemistry)
ASSISTANT PROFESSOR OF BIOCHEMISTRY

.SetActively Involved in Research Work
### Academic support staff (technical) and administrative staff in the department

<table>
<thead>
<tr>
<th>Support staff</th>
<th>Sanctioned</th>
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<td>Technician</td>
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<td>04</td>
</tr>
<tr>
<td>Store Keeper/Clerk</td>
<td>01</td>
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## NON-TEACHING STAFF

<table>
<thead>
<tr>
<th>Position</th>
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<tbody>
<tr>
<td>COMPUTER OPERATOR</td>
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<tr>
<td>TECHNICIANS</td>
<td>4</td>
</tr>
<tr>
<td>ATTENDER</td>
<td>2</td>
</tr>
<tr>
<td>SWEEPER</td>
<td>2</td>
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</table>
## Facilities for Teaching Learning Process

**Infra Structure of the Biochemistry Department:**

1. **Students Practical Hall**  
   320- Sq mts
2. **Two Demonstration Rooms**  
   52- Sq mts
3. **Preparation Room**  
   26- Sq mts
4. **Research Laboratory**  
   52- Sq mts
5. **Store Room**  
   52- Sq mts
6. **Professor & HOD**  
   18- Sq mts
7. **Professor**  
   2x15- Sq mts
8. **Associate Professor**  
   15- Sq mts
9. **Assistant Professor**  
   18- Sq mts
10. **Tutors**  
    18- Sq mts
11. **Office Room**  
    18- Sq mts
## 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 universities outside the State</th>
<th>% of students from other countries</th>
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<tbody>
<tr>
<td>MBBS (2013-2014 batch)</td>
<td>58.6%</td>
<td>41.3 %</td>
<td>0.05 %</td>
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<tr>
<td>Name</td>
<td>Total UG students=150</td>
<td>M</td>
<td>F</td>
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<tr>
<td>--------------</td>
<td>-----------------------</td>
<td>----</td>
<td>----</td>
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<tr>
<td></td>
<td>60</td>
<td>82</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
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<tr>
<td>I year</td>
<td>5</td>
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<tr>
<td>II year</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>III year</td>
<td>2</td>
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</table>

**Student profile**

**Total UG students = 150**
DEPARTMENT HAS FACILITIES FOR

- TRAINING U.G. AND P.G. STUDENTS
- RESEARCH
- CLINICAL BIOCHEMISTRY LABORATORY
TRAINING FACILITY FOR UNDERGRADUATES

- COMMON LECTURE HALL WITH 300 CAPACITY WITH AV AIDS

- PRACTICAL HALL WITH ALL REQUIRED FACILITIES AS PER MCI NORMS

- DEMONSTRATION ROOM WITH AUDIO VISUAL FACILITY AND PROVISION FOR INTERACTIVE TEACHING LIKE SEMINARS & TUTORIALS
TEACHING METHODOLOGY

- Didactic Lectures
- Problem based learning
- Lecture cum Demonstration
- Demonstration
- Practicals
- Group Discussion
- Integrated Teaching
- Tutorial classes: Small group Teaching done with teacher students ratio of 1:10.
- Periodical tests conducted during this teaching and evaluated and discussed individually with students
<table>
<thead>
<tr>
<th></th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>11.</td>
<td>Metabolism of aromatic amino acids</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>12.</td>
<td>Metabolism of sulfur containing amino acids</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>13.</td>
<td>Metabolism of acidic amino acids</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>14.</td>
<td>Metabolism of serine</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>15.</td>
<td>Metabolism of Heme</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>16.</td>
<td>Chemistry of Proteins</td>
<td>Dr. H.V.shetty</td>
</tr>
<tr>
<td>17.</td>
<td>Enzymes</td>
<td>Dr. H.V.shetty</td>
</tr>
<tr>
<td>18.</td>
<td>Factors affecting enzyme activity</td>
<td>Dr. H.V.shetty</td>
</tr>
<tr>
<td>19.</td>
<td>Plasma proteins</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>20.</td>
<td>Immunoglobulins</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>21.</td>
<td>Water and electrolyte balance</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>22.</td>
<td>Lab work up for interns</td>
<td>Dr. H.V.shetty</td>
</tr>
<tr>
<td>Sl.No.</td>
<td>Topics</td>
<td>Authors</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Biological Oxidation</td>
<td>Dr. H.V. Shetty</td>
</tr>
<tr>
<td>2.</td>
<td>Digestion and absorption of Proteins</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>3.</td>
<td>Digestion and absorption of carbohydrates</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>4.</td>
<td>Digestion and absorption of carbohydrates</td>
<td>Dr. Deepti Gupta</td>
</tr>
<tr>
<td>5.</td>
<td>Glycolysis</td>
<td>Dr. Priyadarshini</td>
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<tr>
<td>6.</td>
<td>TCA cycle energetics</td>
<td>Dr. Priyadarshini</td>
</tr>
<tr>
<td>7.</td>
<td>Gluconeogenesis</td>
<td>Dr. H.V. Shetty</td>
</tr>
<tr>
<td>8.</td>
<td>Fatty acid oxidation, Ketogenesis, Obesity</td>
<td>Dr. H.V. Shetty</td>
</tr>
<tr>
<td>9.</td>
<td>Metabolism of lipoproteins Part I, II and III</td>
<td>Dr. H.V. Shetty</td>
</tr>
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<td>10.</td>
<td>Urea cycle</td>
<td>Dr. H.V. Shetty</td>
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PRACTICAL HALL
Student Welfare Programmes

- Mentorship Programmes – Mentors list
- Underperformers counselling Programmes - Annexure -x
- Continuous Progressive Assessment (CPA)
- Student Projects
List of Undergraduate students project

- Study of lipid profile in medical students
- Comparative study of ionic and total calcium in hypothyroidism and hyperthyroidism.
- Study of fasting and postprandial triglyceridemia in medical students.
- Study of serum Transaminases in Type 2 Diabetes Mellitus
- Anemia in obesity
- Estimation of Zinc in Type 2 Diabetes Mellitus
Examination System:

Annual University Examinations are conducted at the end of one year for the 1st MBBS students.
## Result data of last 5 years

<table>
<thead>
<tr>
<th>Year of exams</th>
<th>Total. No. Appeared</th>
<th>Total. No. passed</th>
<th>Total. No. failed</th>
<th>%.pass</th>
<th>%.fail</th>
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<td>2008-09</td>
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<td>45</td>
<td>61</td>
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<td>2010-11</td>
<td>91</td>
<td>36</td>
<td>55</td>
<td>39</td>
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<td>2011-12</td>
<td>73</td>
<td>44</td>
<td>29</td>
<td>60</td>
<td>40</td>
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<td>2012-13</td>
<td>144</td>
<td>55</td>
<td>89</td>
<td>38</td>
<td>62</td>
</tr>
</tbody>
</table>
TRAINING FACILITY FOR POSTGRADUATES

- WELL EQUIPPED CENTRAL AND DEPARTMENTAL LIBRARY
- EQUIPMENTS AVAILABLE FOR POSTGRADUATE RESEARCH LABORATORY
- SEMINAR HALL AVAILABLE FOR INTERACTIVE DISCUSSION
INSTRUMENTS AVAILABLE IN CLINICAL BIOCHEMISTRY LABORATORY OF THE HOSPITAL

- THREE AUTO ANALYZERS
- TWO SEMI AUTO ANALYZERS
- ELISA WITH READER AND WASHER
- THREE ELECTROLYTE ANALYZERS
- SPECTROPHOTOMETER
- AUTOMATED ELECTROPHORESIS
Autoanalyser
Hospital Laboratory
Total number of books available - 12557

Books pertaining to Biochemistry - 737

Number of titles in Biochemistry - 101
### CENTRAL LIBRARY JOURNALS

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tr>
<td>Number of Indian Journals</td>
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</tr>
<tr>
<td>Number of International Journals</td>
<td>63</td>
</tr>
<tr>
<td>Number of Biochemistry Journals</td>
<td>5</td>
</tr>
<tr>
<td>Indian Journals</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Journals</td>
<td>1</td>
</tr>
</tbody>
</table>
e - JOURNALS

Rajiv Gandhi University of Health Sciences (RGUHS) Bangalore

- Access through HELINET facility available
- Number of e-journals - 511
- Biochemistry related journals - 11
DEPARTMENTAL LIBRARY

DEPARTMENT LIBRARY HAS BOOKS FOR THE USE OF STAFF & POST GRADUATES STUDENTS.

BIOCHEMISTRY & ALLIED BOOKS

142 BOOKS WITH 101 Titles
PG DEVELOPMENT PROGRAMMES

- Journal Club – Annexure XI
- Participating in teaching learning methodology workshops
- Participation in CMEs
- Participation in regional and national conferences
- Presenting seminars - Annexure XIII
RESEARCH

THE DEPARTMENT IS ACTIVELY INVOLVED IN RESEARCH ACTIVITIES

List of titles of faculty research - Annexure XII
List of Publications – Annexure XVIII
List of completed projects – Annexure XXIV
INTERNATIONAL RESEARCH COLLABORATION

Dr. H V Shetty, MD, Co-Principal Investigator

Project Title: A study of feasibility of a retrospective cohort study on Low birth weight, rapid catch-up growth and selected cardiovascular risk factors among children and young adults in Karnataka, South India.

Collaborating: West Midlands ethnic minority Liaison committee-community interest company (WELCOME-CCI) and department of community medicine of Rajarajeswari medical college, Bangalore, India.

Principal investigator: Dr. Pradeep Banandur, MD MPH, Associate Professor, Department of Community Medicine Rajarajeswari medical college, Bangalore, India.

Project Supervisor and Co-Principal Investigator: Dr. Anandagiri Mshankar, MD, MPH, MFPH, Consultant in Community Disease control, Norfolk, Suffolk and Cambrigeshire Health Protection Unit, United Kingdom and member WELCOME-CIC.
Department of Biochemistry  
Poster and Paper presentations  
Post graduate student Dr. Manjula K.S

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Date</th>
<th>Poster/Paper</th>
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<tbody>
<tr>
<td>1</td>
<td>4th August 2012</td>
<td>Poster on Study of Transaminases in Thyroid Disorders</td>
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<tr>
<td></td>
<td></td>
<td>International Medical Sciences Academy conference</td>
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<tr>
<td>2</td>
<td>12th December 2012</td>
<td>Poster on Study of serum Transaminases in Hypothyroidism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39th ACBICON 2012 at Ranchi</td>
</tr>
<tr>
<td>3</td>
<td>10th February</td>
<td>Measures to avoid Pre analytical Errors in Laboratory Medicine</td>
</tr>
</tbody>
</table>
**Department of Biochemistry**  
**Poster and Paper presentations**  
**Post graduate student Dr. Reena R.**  

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Date</th>
<th>Posters/papers</th>
</tr>
</thead>
</table>
| 1     | 4<sup>th</sup> August 2012 | Poster on Study of Creatinine kinase and Lactate Dehydrogenase in Thyroid Disorders  
International Medical Sciences Academy conference (IMSA) |
| 2     | 12<sup>th</sup> December 2012 | Paper presented on Study of serum CK and LDH in Hypothyroidism  
39<sup>th</sup> annual conference of ACBI 2012 at Ranchi |
| 3     | 10<sup>th</sup> February  | Free Radicals and Anti oxidants  
Indian Medical Association annual Conference |
### Department of Biochemistry
#### Poster and Paper presentations
#### Post graduate student Dr. Mamata

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Date</th>
<th>Poster/Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14/09/2013</td>
<td>Poster on – “Evaluation of the changes in glycated haemoglobin and lipid parameters in Type II Diabetes Mellitus”. 1&lt;sup&gt;st&lt;/sup&gt; state level conference – JJMMC AMBKCCON 2013.</td>
</tr>
<tr>
<td>2</td>
<td>06/10/2013</td>
<td>Poster on- “Study of changes in the concentration of serum zinc and HbA1c levels in Type II Diabetes Mellitus patients”. 31&lt;sup&gt;st&lt;/sup&gt; annual conference cum convocation – International medical sciences academy- IMSACON 2013 in association with Rajarajeshwari medical college and hospital.</td>
</tr>
</tbody>
</table>
### Department of Biochemistry

**Poster and Paper presentations**

Post graduate student Dr. Deepa M

<table>
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<tr>
<th>SL.No.</th>
<th>Date</th>
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</thead>
</table>
| 1     | 14<sup>th</sup> SEPTEMBER 2013 | Poster presented on-“Significance of measuring Non-HDL-Cholesterol among patients with type 2 diabetes mellitus”. 
1<sup>st</sup> state level conference-JJMMMC AMBKCCON 2013.                                       |
| 2     | 6<sup>th</sup> OCTOBER 2013  | Poster presented on-“Study of serum Gamma Glutamyl Transferase as an oxidative stress marker in Non-Alcoholic fatty liver disease (NAFLD)”. 
RAJARAJESHWARI MEDICAL COLLEGE & HOSPITAL
DEPARTMENT OF BIOCHEMISTRY

List of Dissertation topics

Post graduates – 2012 - 2015

1. Dr. V. Mamatha
A study of G6PD, zinc and HBAIC levels in type 2 diabetes mellitus patients at RRMC & H

2. Dr. Deepa. M
Study of serum lipid profile and liver enzymes in Ultrasound diagnosed cases of Non Alcoholic fatty liver disease (NAFLD).

Post graduates – 2011 – 2014

3. Dr. Reena. R
Study of serum paroxonase & myeloperoxidase activities & malondialdehyde levels in preeclampsia

4. Dr. Manjula . K.S
Study of serum ferritin & Glycated hemoglobin levels in type II DM
Post graduates – 2013 -2016
1. Dr Manjula H S
   Study of vitamin D and uric acid levels in patients with hypertension.

2. Dr. Vijayalakshmi P
   Study of serum cystatin C in pre-eclampsia.

3. Dr. Victoria Kshetrimayum.
   Study of hs-CRP and insulin levels in hypothyroidism.

4. Dr. Varsha Mohan.
   Study of Serum electrolytes levels during nebulised salbutamol therapy.

5. Dr. Nandini. M D
   Study of Homocysteine levels in pre – eclampsia.
The lab is equipped to perform routine
and
Special Investigations

EMERGENCY INVESTIGATIONS ARE DONE 24 HOURS

Approximately 72000 investigations are carried out per month
LINK WITH OTHER INSTITUTIONS

OUR INSTITUTION IS ATTACHED TO

- CMC: VELLORE
- BIO-RAD: USA

FOR QUALITY ASSURANCE PROGRAMMES
Department of Clinical Biochemistry
Christian Medical College, Vellore - 632 004

ACBI / CMC EXTERNAL QUALITY ASSURANCE SCHEME

Certificate of Participation

This is to certify that
RAJARAJESWARI MEDICAL COLLEGE & HOSPITAL
BANGALORE.

3674
Lab No. has participated
in the Chemistry Program
of the External Quality Assurance Scheme
during the year 2012.

Dr. R. Selvakumar M.Sc., Ph.D
Prof. & Head of Clinical Biochemistry

VELLORE
January 2013
### CME Programmes Conducted at Rajarajeswari Medical College, Bangalore (contd.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Topic</th>
<th>Presenter</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>20/04/2012</td>
<td>Quiz</td>
<td>Dr. Venkatesh Thuppil&lt;br&gt;Director NRCLPI,&lt;br&gt;Department of Biochemistry,&lt;br&gt;St. John’s Medical College, Bangalore</td>
<td>Translational Research and project lead safe</td>
</tr>
<tr>
<td>5</td>
<td>26/03/2013</td>
<td>Laboratory workup</td>
<td>Dr H.V. Shetty,&lt;br&gt;Professor and HOD,&lt;br&gt;Biochemistry,&lt;br&gt;RRMC&amp;H, Bangalore.</td>
<td>Laboratory workup for Interns</td>
</tr>
<tr>
<td>6</td>
<td>12/12/2013</td>
<td>Mass spectrometry</td>
<td>Dr. Rita Christopher&lt;br&gt;Professor and HOD,&lt;br&gt;Department of Neurochemistry,&lt;br&gt;NIMHNAS, Bangalore</td>
<td>Inborn errors of metabolism and recent advances in screening methods.</td>
</tr>
</tbody>
</table>
# CME Programmes Conducted at Rajarajeswari Medical College, Bangalore

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Date</th>
<th>CME</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>07/08/2009</td>
<td>Changing Trends with Newer Concepts in field of Pharmacology, Physiology, Biochemistry and General Medicine</td>
<td>Dr H.V. Shetty, Professor and HOD, Biochemistry RRMC&amp;H, Bangalore.</td>
<td>Lipoproteins in health and Diseases</td>
</tr>
<tr>
<td>2</td>
<td>09/12/2011</td>
<td>Evaluation of Pediatric renal disorders</td>
<td>Dr H.V. Shetty, Professor and HOD, Biochemistry RRMC&amp;H, Bangalore.</td>
<td>Evaluation of Pediatric renal disorders with urine examination</td>
</tr>
<tr>
<td>3</td>
<td>20/04/2012</td>
<td>Lead safe</td>
<td>Dr. Venkatesh Thuppi, Director NRCLPI, Department of Biochemistry , St. John’s Medical College, Bangalore</td>
<td>Translational Research and project lead safe</td>
</tr>
</tbody>
</table>
CME ON TRANSLATIONAL RESEARCH AND PROJECT LEAD SAFE
DR. H. V. SHETTY HEAD OF THE DEPARTMENT OF BIOCHEMISTRY, ADDRESSING THE GATHERING
DR. VENKATESH THUPPIL – GUEST SPEAKER
LEAD MAN OF INDIA
DR. H.V. SHETTY HEAD OF THE DEPARTMENT OF BIOCHEMISTRY PRESENTING A BOUQUET TO DR. VENKATESH THUPPIL
Inborn Errors of Metabolism: Recent advances in screening

Dr. Rita Christopher
National Institute of Mental Health & Neuro Sciences
Bangalore 560029

CME ON INBORN ERRORS OF METABOLISM
DR. H. V. SHETTY  HEAD OF THE DEPARTMENT OF BIOCHEMISTRY  WELCOMING DR. RITA CHRISTOPHER
DR. RITA CHRISTOPHER  GUEST SPEAKER
PROFESSOR AND HOD OF NEUROCHEMISTRY
NIMHANS
DR. PRABHUDEVA, SPECIAL OFFICER PRESENTING A BOUQUET TO THE SPEAKER
AUDIENCE IN THE CME PROGRAMME
ADDITIONAL FEATURES

- ALL DOCUMENTATION IN ORDER FOR EASIER ACCESS.
- THIS IS ACHIEVED BY THE USE OF APPROPRIATE PROCEDURE.
- DEPARTMENT PROVIDES EXCELLENT ATMOSPHERE FOR THE FACULTY AND STUDENTS FOR INTERACTIVE AND ENJOYABLE LEARNING
STRENGTHS

- Well qualified and experienced staff
- State of art Laboratory to promote patient service and research.
- Collaboration with other agencies (CMC, Vellore and BioRad, USA) for quality assurance programmes.
- Post graduate department with nine enthusiastic PGs
- Mentorship programmes for student welfare.
OPPORTUNITIES

• For inter departmental collaboration in academics and research
• For the PGs and faculty to avail Hi-Tech instrument facilities (CLIA, HPLC etc)
• Opportunity for research for PGs and faculty in a Hospital with ultra modern facilities with good patient input.
• Opportunity to get ICMR project with existing facilities
CHALLENGES

• To set up Molecular Biology laboratory
• To meet the goal set by us for the next five years
• To meet excellence in service, research and education at subsidised cost.
• Preparedness in the Clinical Biochemistry Laboratory to overcome the newly emerging diseases in the community
THANK YOU