



**YENEPOYA**

(DEEMED TO BE UNIVERSITY)

Recognized under Sec 3(A) of the UGC Act 1956

Accredited by NAAC with 'A' Grade

## Details of the Collaborative Activity

2017-18

**Name of the Collaborating Institute:** Bengaluru Genomics Center, Institute of Bioinformatics and Applied Biotechnology, Bangalore, Karnataka

**Name of the Collaborating Department with YDU:** Yenepoya Research Center.

**Year of MoU:** 2017

### Activities

- **Joint Research Project:**

Dr. Malali Gowda, Bengaluru Genomics Center, Institute of Bioinformatics and Applied Biotechnology collaborated with Dr. T S Keshav Prasad, Yenepoya Research Center, Yenepoya (Deemed to be University) and submitted joint research project to VGST-CESEM on topic

**Title of the Project:** Establishment of a HLA Registry in Coastal Karnataka for finding donors for bone marrow transplantation in Indian communities.

**MOU:** MoU between Center for Systems Biology and Molecular Medicine, Yenepoya Research Center and Bengaluru Genomics Center was signed in 2017.

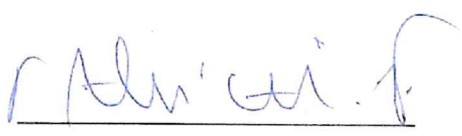
ATTESTED


Dr.Gangadhara Somayaji K.S.  
Registrar  
Yenepoya(Deemed to be University)  
University Road, Deralakatte  
Mangalore- 575 018, Karnataka

**7. Letter for Collaboration from Reputed Researcher/ Institution/ Organization/ Industry/ Research Lab/ Analytical Lab.**

1	Name of the Institution/ Organization/ Industry/ Research Lab/Analytical Lab	Bangalore Genomics Centre, Bengaluru
2	Name of the Collaborating Department	Bangalore Genomics Centre, Bengaluru
3	Name & Designation of the Collaborator	Director
4	Research Topic:- [as given in CESEM/ CISE/ SMYSR/ K-FIST (L2)]  (It is not required for K-FIST (L1) Grantee Institution)	Genomics
5	<b>Contact Details:-</b>	
	a) Address	Bengaluru Genomics Centre, IBAB, Biotech Park, Electronics City Phase 1, Near Arvind Mills, Electronic City, Bengaluru – 560100
	b) Telephone	+91-80-28528901
	c) Mobile	+91-8105320806
	d) Fax	
e) E-mail	<a href="mailto:pruthvichakravarthi@gmail.com">pruthvichakravarthi@gmail.com</a> , <a href="mailto:pruthvi@blrgenomics.com">pruthvi@blrgenomics.com</a>	


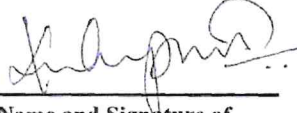
I am willing to collaborate with Yenapoya University, Dept. of **Centre for Systems Biology and Molecular Medicine** institution for CESEM/ CISE/ SMYSR/ K-FIST (L2) Programme of VGST and I am agreeing to provide the required assistance in the research related activity to Programme Co-ordinator.

<p><b>Date 27<sup>th</sup> October 2017</b></p> <p><b>Place: Bengaluru</b></p>	 <b>Signature of Collaborator</b> <b>BENGALURU GENOMICS CENTER</b> <small>(with Seal)</small> Institute of Biometrics and Applied Biotechnology, Biotech Park, Electronics City Phase-1, Electronic City, BENGALURU - 560 100.
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## 8. Applicant Declaration Letter

(Common declaration for CESEM, CISEE, K-FIST-LEVEL1 & 2 & RGS/F).

1	VGST PROGRAMME	CESEM				
2	Period of the VGST Programme	One Year		Two Years		Three Years
4	COLLEGE/ Institution Address	Centre for Systems Biology and Molecular Medicine (CSBMM) Yenepoya University, University Road, Deralakatte, Mangalore -575 018, Karnataka State				
5	DEPARTMENT	Centre for Systems Biology and Molecular Medicine (CSBMM)				
6	TOPIC/ TITLE	Establishment of a HLA Registry in coastal Karnataka for finding donors for bone marrow transplantation in Indian Communities				
7	Applicants details	Name	Dr TS Keshava Prasad			
		Designation	Deputy Director & Professor			
		Contact number	9972250102			
<ul style="list-style-type: none"> <li>I am aware of all instructions and directions indicated in <u>Guidelines, Terms and Conditions (GTC)</u> present in the Concept Proposals of VGST.</li> <li>If my proposal is selected by VGST, I undertake to utilize the VGST grant by strictly adhering to the GTC of VGST.</li> <li>If my proposal is selected by VGST and in case of my <u>transfer/ retirement/ deputation/ termination</u> from this Grantee Institution, I shall obtain NOC from VGST office by suggesting another responsible faculty member as Programme Co-ordinator (PC), who belongs to the grantee Dept. of this College/ Institution (Not applicable to RGS/F scheme).</li> <li>If my proposal is selected by VGST, I shall procure the equipment within the allowed cost as approved by VGST in the Budget Estimate (Both Non-Recurring &amp; Recurring) within the stipulated period by following due <u>guidelines</u> of KTPP Act.</li> <li>If my proposal is selected by VGST, I shall obtain the VGST approval of the Budget Estimate (both Non-recurring &amp; Recurring) before utilizing the VGST grant.</li> <li>If my proposal is selected by VGST, I will not procure any equipment which is not approved by VGST. If such procurement of Equipment/Item is made without VGST's approval, the Programme Co-ordinator/College Management/ Grantee Institution will bear the cost of the equipment/Item.</li> <li>I shall not seek for further changes in the Original Budget Estimate (Both Non-Recurring &amp; Recurring) (as indicated in my Original Proposal) submitted by me to VGST.</li> </ul>						
		 <hr/> <b>Name and Signature of Applicant (with seal)</b> <b>T. S. Keshava Prasad, Ph.D.</b> <b>Professor and Deputy Director</b> <b>YU-IOB Center for Systems Biology and Molecular Medicine</b> <b>Yenepoya University</b> <b>Mangalore - 575 018 India</b>				
Date: Oct 30, 2017		Place: Mangalore.				

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## MEMORANDUM OF UNDERSTANDING

### **YU-IOB Center for Systems Biology and Molecular Medicine**

Yenepoya Research Center, Yenepoya University, Deralakatte,  
Mangalore 575 018, Karnataka, India.

AND

### **Bengaluru Genomics Center**

Institute of Bioinformatics and Applied Biotechnology  
Biotech Park, Electronics City Phase 1, Electronic City,  
Bengaluru 560100, Karnataka, India.

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K.R. Lakshmi



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## MEMORANDUM OF UNDERSTANDING

This agreement is entered into at Mangalore on this day the 1st in the month of January in the year two thousand and seventeen between;

**YU-IOB Center for Systems Biology and Molecular Medicine**, Yenepoya Research Center, Yenepoya University, Deralakatte, Mangalore 575 018, Karnataka, India (hereinafter called 'YU-IOB CSBMM')

AND

Bengaluru Genomics Center, Institute of Bioinformatics and Applied Biotechnology, Biotech Park, Electronics City Phase 1, Electronic City, Bengaluru 560100, Karnataka, India. (hereinafter called 'BGC')

**WHEREAS YU-IOB CSBMM** is an academic research center at Yenepoya University, Mangalore, engaged in the genomic, proteomic and metabolomic approaches to investigate communicable and non-communicable diseases, pathogens, plants and plant products

**WHEREAS BGC** is a Genomics Science Company providing a variety of next generation sequencing services for agriculture, medicine and life science research

Both the above parties held discussions at various times to enter into an agreement related to matters of mutual interest and decided to deduce their respective roles and points of agreement jointly hereunder:

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K.R. Lakshmi

## OBJECTIVES

The objectives of this linkage are to develop long-term cooperative activities. The activities may include, but are not limited to, the following:

- 1) Conduct seminars and workshops to educate and train of faculty/staff on genomic medicine
- 2) Genetic screening of patients for important disease/disorders
- 3) Develop collaborative programs by seeking funding opportunities to provide mutual benefit to each institution's research and outreach activities.

### The following are the conditions of the MOU

1. Both the parties decided to work closely on research projects involving whole genome, transcriptome, exome and targeted sequencing using NextGen sequencing technologies and proteomic and metabolomic analysis using mass spectrometry. These research projects will be an attempt to enhance knowledge in the fields of genomics and transcriptomics of communicable and non-communicable diseases, pathogens, plants and plant products
2. Dr. Keshava Prasad and other scientists will represent the YU-IOB CSBMM and Mrs. Roopalakshmi K., Dr. Malali Gowda, Advisor to BGC and other scientists will represent BGC. They will supervise the above-mentioned research projects.
3. Both the parties will work for academic interest. In the event of the outcome of any intellectual property, both the institutes will share it as then decided upon. All participants from both organizations (*as specified by the representatives of both centers*) will be co-authors in research papers, conference presentation and academic events that emanate from the proposed research projects.
4. As per the mutual agreement, BGC will facilitate and extend expertise and consultations, for next generation sequencing as appropriate.

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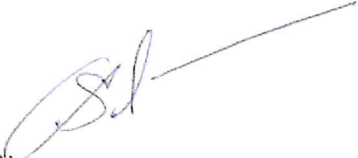
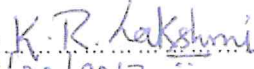
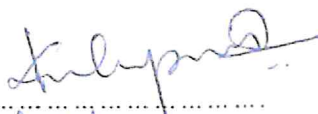

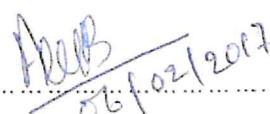
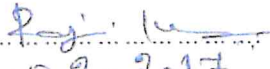
5. YU-IOB CSBMM will provide facilitate and extend expertise and consultations, for proteomic and metabolomic analysis as appropriate
6. BGC will provide instrumentation time for NextGen sequencing including Illumina HiSeq and Oxford Nanopore platforms, expertise in library prep, data analysis and interpretation
7. YU-IOB CSBMM will provide the instrumentation time including mass spectrometers, expertise in sample prep, mass spectrometry, data analysis and data interpretation.
8. Both parties will apply for joint grant proposals and services in order to generate funds for consumables used in joint projects.
9. This study will not involve any type of radioactive material.

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K.R. Lakshmi

<p>Signature: </p> <p>Date: 06/02/2017</p> <p><b>Dr. G. Shreekumar Menon</b> Registrar Yenepoya University, Mangalore - 575018, Karnataka, India</p>	<p>Signature: </p> <p>Date: 06/02/2017</p> <p><b>Mrs. Roopalakshmi K</b> Chief Executive Officer Bengaluru Genomics Center Institute of Bioinformatics and Applied Biotechnology, Biotech Park, Electronics City Phase 1, Electronic City, Bengaluru 560100, Karnataka, India</p>
<p>Signature: </p> <p>Date: 06/02/2017</p> <p><b>Dr. T. S. Keshava Prasad</b> Professor and Deputy Director YU-IOB Center for Systems Biology and Molecular Medicine Yenepoya University Mangalore, Karnataka, India - 575018</p>	<p>Signature: </p> <p>Date: 04/02/2017</p> <p><b>Dr. Pruthvi Chakravarthi . T.</b> Director <b>Bengaluru Genomics Center</b> Institute of Bioinformatics and Applied Biotechnology, Biotech Park, Electronics City Phase 1, Electronic City, Bengaluru 560100, Karnataka, India</p>
<p>Signature: </p> <p>Date: 06/02/2017</p> <p><b>Dr. Arun Bhagwath</b> Professor and Deputy Director Yenepoya Research Center Yenepoya University Mangalore, Karnataka, India - 575018</p>	<p>Signature: </p> <p>Date: 4.02.2017</p> <p><b>Mr. Rajani kantha</b> Director <b>Bengaluru Genomics Center</b> Institute of Bioinformatics and Applied Biotechnology, Biotech Park, Electronics City Phase 1, Electronic City, Bengaluru 560100, Karnataka, India</p>

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