

Global Medical Education and Research Foundation

Annual Report, 2019-2020

Today GMERF is 8 years old. It has made steady progress, thanks to patronage and support from its president Dr. K. Ravindranath, Dr. P. Rama Rao, the Chairman of the Advisory Board, all advisory board members, our associate academic institutions, staff of Global Hospitals and all of you.

GMERF hopes to bring all academic programs of our hospital under one roof in addition to offering its own research, training and academic programs.

Vice-President, Professor K S Ratnakar sad demise on November 17th 2019 left GMERF under shock. 1st Dr KS Ratnakar Memorial lecture on November 16th, 2020 was held virtually due to Covid. The oration was delivered by Prof. Geeta K Vemuganti, Former Dean, School of Medical Sciences, UoHyd.

The VP position of GMERF fell vacant and would be filled when an appropriate candidate gets identified. Further to the resignation of Dr V Sritharan, the Member Secretary of GMERF, Dr Lakshmi Kiran Chelluri has been elevated as the Member Secretary to look in to administrative nuances of GMERF.

3 and 6 month internship has been introduced as a finishing school concept for the Life Sciences Post graduates.

Two new Pharmacy colleges have approached for Collaboration for Pharm D internship program with GMERF.

Existing expired MoUs have been renewed for the next 5 years.

We could not celebrate our Foundation Day in 2020 due to COVID. Following are the activities that are on-going at GMERF.

Training Activities:

A total of **42** students underwent training under the auspices of GMERF in various disciplines during 2019-20. This includes Nutrition (**30**), DNB (**9**) Biochemistry (**2**), Advanced Diagnostics & Therapeutics (**1**).

Publications:

S. No	Publication Title	Journal & Year of Publication	Authors
1	Hemolysins of Staphylococcus aureus – An update on their biology, role in pathogenesis and as targets for Anti-Virulence therapy	Advances in Infectious Diseases-2019	Sireesha Divyakolu, Rosy Chikkala, Kamaraju Suguna Ratnakar, Venkataraman Sritharan
2	A simple sample processing protocol and multiplex PCR for Direct detection of MRSA from uncultured clinical samples – A Pilot study	Advances in Infectious Diseases-2019	Rosy Chikkala, Swathi Ch, Sireesha Divyakolu, KS Ratnakar, Venkataraman Sritharan
3	Quorum quenching as a strategy for treating Methicillin Resistant S. aureus. Effect of ϵ -Polylysine, ethanolic extracts of guava leaves and mango seed kernel	Accepted by IJBB (2020)- under review	Sireesha Divyakolu, Rosy Chikkala, Saipriya Kamaraju, Venkataraman Sritharan
4.	Quorum-sensing system in Acinetobacter baumannii : a potential target for new drug development	Journal of Applied Microbiology 2019	Saipriya, K.; Swathi, C.H.; Ratnakar, K.S.; Sritharan, V.
5	Is Quorum sensing inhibition a potential target to combat multidrug resistant Acinetobacter baumannii? - A Proof of concept study	Journal of Biotechnology and Biochemistry 2020	Saipriya Kamaraju ¹ , Swathi Cheguri ² , Sireesha Divyakolu ³ & Venkataraman Sritharan ⁴
6	A simple method for direct detection and discrimination of A. baumannii in uncultured tracheal aspirates	Journal of Applied Microbiology 2020	CH. Swathi ¹ , S. Sukanya ² , V. Lakshmi ³ , K. Saipriya ⁴ , Venkataraman Sritharan ⁵
7	Standardization and quality assessment for clinical grade mesenchymal stem cells from human adipose tissue	Hematology, transfusion and cell therapy.2019	Tanya Debnath, Lakshmi Kiran Chelluri.
8	Magnetic Nanoparticles For Drug Delivery	Nanoparticulate Drug Delivery Systems 2019	Meenakshi Ponnana, Lakshmi Kiran Chelluri.
7	Distinct Cell Death Mechanisms In Critical Care Patients Diagnosed With Sepsis	January 2019. Critical Care Medicine 47:769. DOI: 10.1097/01	Charitha Madiraju, Chandra Shekar Mallarpu, Sudhir Prasad, Maneendra Singarapu, Meenakshi P, Tanya Debnath, Lakshmi Kiran Chelluri..
8	In Vitro Development of an Acellular Biological Liver Scaffold Repopulated with Rat Hepatocytes	J Tissue Sci Eng 10: 224, May 01, 2019.	Tanya Debnath, Kancherla Ravindranath, Chandra Shekar Mallarpu, Pavan Mujawdiya, Suman Kapur and Lakshmi Kiran

			Chelluri
9	Identification of autophagy markers in clinical cases of Sepsis-	J Immunol May 1, 2019, 202 (1 Supplement) 120.13.	Charitha Madiraju, Chandra Shekar Mallarpu, Sudhir Prasad, Maneendra Singarapu, Harvinder Brar, Nemanja Bratic, Neda Haririparsa, Jean H. Kim, Meenakshi Ponnana and Lakshmi Kiran Chelluri.
10	Implementation manual to prevent and control the spread of Carbapenem –resistant organisms at the national and Health care facility level	WHO Geneva 2019	Dr. RNIyer, WHO/UHC/SDS/2019.6). Licence: CC BY-NC-SA 3.0 IGO)
11	Antimicrobial Stewardship programme: from policies to practices: Survey of antimicrobial stewardship programme practices from 26 centres in India.	J Acad Clin Microbiol 2019;21(1): 4-9	Bhattacharya S, Joy VM, Goel G, Nath SR, Santosh S, George K, Iyer R, et al
12	Predictors of mortality in solid-organ transplant recipients with carbapenemase-producing Enterobacteriales blood stream infections: the impact of cyto-megalo virus disease and lymphopenia. As part of the ESGICH group project of the ESCMID	Am J Transplantation 2020;20:1629-1641	K, Iyer R, et al
13	Epidemiology and Prevalent Rotavirus Genotypes and Clinical Severity of Acute Gastroenteritis among Vaccinated and Unvaccinated Children.	Indian J Pediatr (2020).	Rani, M., Kammili, N., Iyer, R.N. <i>et al.</i>
14	Two cases of Nocardia bacteremia in solid organ transplant recipients.	Indian J Med Microbiol 2020; 38:123-6	Iyer R.N., Rao JR, Rudramurthy S, Kapoor D.
15	Development of bioengineered organ using biological acellular rat liver scaffold and hepatocytes	Journal of Organogenesis March 2020	Tanya Debnath, Chandra Shekar Mallarpu, Lakshmi Kiran Chelluri,
16	Prognostic value of autophagy markers in sepsis- a clinical case report	J Immunol May 1, 2020, 204(1 Supplement) 225.22	Chandra Shekar Mallarpu, Meenakshi Ponnana, Sudhir Prasad, Maneendra Singarapu, Lakshmi Kiran Chelluri and Charitha Madiraju,
17	Distinct cell death markers identified in critical care patient survivors diagnosed with sepsis	Immunology Letters , 17 December 2020.	Chandra Shekar Mallarpu, Meenakshi Ponnana, Sudhir Prasad, Maneendra Singarapu, Lakshmi Kiran Chelluri and Charitha

			Madiraju,
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Professional meeting presentation:

SoCal Immunology Virtual Poster presentation at The American Association of Immunologists, San Diego CA, Aug-2020

Poster presentation at The American Association of Immunologists, San Diego CA, May 9-13, 2019 [peer-reviewed]

Research snapshot presentation at the Annual Congress-Society of Critical Care Medicine, San Diego CA, February 17-20, 2019 [peer-reviewed]

Conferences:

2 conference presentations by our PhD students in International Conference on Recent Advances in Biotechnology & Biochemistry ICRABB 2020 at National Institute of Technology Raipur.

Projects under submission/Ongoing

1. Epigenetics re-programming in diabetes leading to tuberculosis susceptibility. DBT TATA Innovation Fellowship.
2. Organ Regeneration Using Differentiated Hepatocytes on Human Explant Liver Scaffolds
3. DBT Skill Vigyan Programme
4. Indo-US Collaborative work on Immune markers of infection mediated inflammation (ongoing)
5. Articular Cartilage Tissue Construct by Microfluidics in an Organ-on-a-chip

Our Primary Research Partners:

ARCI (DST)

University of Hyderabad.

Indian Institute of Technology-Delhi.

Osmania University

JNTU-Hyderabad

BITS Pilani, Hyderabad Campus

Defense Research Labs

Marshall Ketchum College of Pharmacy, Fullerton, California, USA

Recognitions and Awards:

1. SRF awarded by ICMR to Mrs. Rosy Chikala, has completed her PhD in December 2018 and awarded in May 2019
2. Dr. Tanya was awarded a Post-doctoral Fellowship by DST and completed in April 2019

Infrastructure:

We have a research laboratory and an IT laboratory which can support research projects of post-graduate students and PhD students in life sciences.

Website:

Our website is now active and you may visit www.gmerf.com for more information about all our activities. Updates on Nutrition course has been highlighted.