

MoU FOR VISITING FELLOW

This MOU for Visiting Fellow (the "MOU") is entered into effective June 1, 2024, by and between Emory University, by and through its School of Medicine, on behalf of its Emory Vaccine Center, located in Atlanta, DeKalb County, Georgia, United States ("Emory"/"EVC"), and Jamal Mohamed College, an autonomous college located in the city of Tiruchirappalli, State of Tamil Nadu, India ("JMC"), and affiliated to Bharathidasan University, Tiruchirappalli.

WHEREAS, the parties entered into the Memorandum of Understanding ("Original MOU") effective as of October 1, 2022 (<https://jmc.edu/invitation2022-2023/MoU/JMC-FVC-MOU-%20Executed-August-2022.pdf>), aiming, among other things, at an exchange of students and faculty between the two institutions on research programs within the field of Vaccine Research and Technology; and

WHEREAS, the JMC has established the Jamal Vaccine Research Centre (JVRC) with an ambitious plan to fulfill the requirements in the Original MOU, and Mr. Umar Sherif, J, a Ph.D. scholar of JMC, one who is associated with the JVRC, has been identified by the JMC as a visiting fellow for EVC ("Visiting Fellow"); and

WHEREAS, the parties wish to set forth the terms and conditions of the arrangement for the Visiting Fellow.

NOW THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL PROMISES, COVENANTS AND AGREEMENTS CONTAINED HEREIN, AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE RECEIPT AND SUFFICIENCY OF WHICH ARE HEREBY ACKNOWLEDGED, THE PARTIES, INTENDING TO BE LEGALLY BOUND, HEREBY AGREE AS FOLLOWS:

The Visiting Fellow:

Visiting Fellow, Mr. Sherif, had pursued college studies at JMC, whereupon he was conferred a Bachelor's degree in Zoology in 2021, with first class/distinction, followed by a Master's degree in Zoology in June 2023, with an "O" grade reflecting an outstanding performance. Throughout the academic pursuit, Visiting Fellow consistently scored high marks, earning 92.1 percent in B.Sc. Zoology core subjects and 86.8 percent in M.Sc. Zoology. Bharathidasan University had declared him competent to pursue Ph.D. following his successful clearance of the university's Ph.D. entrance examination. Availing this declaration, Visiting Fellow has enrolled for the Ph.D. program at JMC's Research Department of Zoology, with Dr. Sadiq Bukhari, an Associate Professor, as his JMC supervisor/mentor. The chosen topic of research is to find vaccines for diseases of aquaculture species in delta regions in Tamil Nadu. Visiting Fellow is passionate about vaccinology and aspires to become a scientist in this field. Visiting Fellow wishes to engage in research pertaining to vaccines for a human disease as may be mutually agreed among Visiting Fellow, his JMC supervisor/mentor, and his EVC sponsor/mentor.

The Sponsor and the Mentor at EVC:

Dr. Rafi Ahmed, a distinguished immunologist and member of the National Academy of Science, has been a leading force in shaping the understanding of memory T cell differentiation and anti-viral immunity. Over the past decade, the research at his lab has focused on elucidating the mechanisms of B and T cell immunological memory, ultimately aiming at development of new vaccines for disease prevention and treatment. Utilizing sophisticated techniques, his lab explores the molecules regulating CD8 and CD4 T cells and humoral immunity. His outstanding contributions include identification of TOR as a key regulator of memory CD8 T cell differentiation. Dr. Rafi Ahmed has offered himself to be the mentor of Visiting Fellow, and the sponsor too. More so, Dr. Rafi Ahmed will support Umar Sherif with a salary from one of Dr. Rafi Ahmed's research grants which will cover boarding, lodging, and insurance during Visiting Fellow's six-month stay at Emory. The mentorship and the financial support ensure that the next generation researchers, like Visiting Fellow, can fully immerse themselves in the full-time visiting fellowship experience without hindrance. The mentorship provided by Dr. Rafi Ahmed extends beyond financial support since as a guide and mentor he will play a pivotal role in shaping Visiting Fellow's research endeavors while at Emory. This inclusive approach acknowledges the importance of mentorship in fostering an enriching learning experience. Dr. Rafi Ahmed's dedication reflects his commitment to nurturing talent, fostering academic growth, and ensuring that scholars can focus on their research with confidence, knowing that their basic needs and accommodations are well taken care of. This holistic support creates an environment conducive to the exploration of immunology and vaccine development, emphasizing both academic and practical aspects of the field.

Expected Outcome:

During a 6-month visiting fellowship dedicated to research at EVC, Visiting Fellow can immerse himself in a curriculum that will typically cover fundamental aspects of immunology, providing insights into the immune system's workings, including the roles of antibodies and T cells. A significant portion of the fellowship will delve into the intricacies of vaccine development, from conceptualization through preclinical and clinical trial phases. Practical laboratory skills will be honed, encompassing techniques like cell culture, flow cytometry, and *in silico* analysis. Visiting Fellow will also gain proficiency in data analysis, crucial for evaluating vaccine efficacy and safety.

Notably, the techniques learned during this fellowship will be put to practice upon his return to JVRC at JMC. This implementation aims to further enhance and contribute to the ongoing research initiatives within the college. Emphasis will be placed on applying the acquired knowledge and skills to improve the research landscape, specifically contributing to advancements in immunology and vaccine research. This collaborative effort underscores the benefits of international research collaboration programs in fostering academic growth and advancing scientific endeavors.

Thus, it is agreed between Emory, and JMC that EVC provides the opportunity for Visiting Fellow to visit EVC as a visiting fellow and gain access to certain of the Emory facilities and resources in order to engage in learning and research pertaining to vaccinology under the sponsorship and mentorship of Dr. Rafi Ahmed (the "EVC Sponsor").

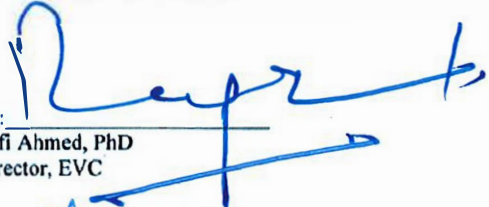
The following terms and conditions apply to this MOU:

1. Umar Sherif's visit to EVC must be mutually agreed upon by his supervisor (or equivalent) at JMC, the supervisor's chair (Head of the Department) and the Head of the Institution (Principal), the proposed supervisor at EVC, the chair or center head of Emory, and the superior(s) thereof, as may be required.
2. Visiting Fellow's visit to EVC will begin in or around June 2024 and last for six (6) months unless sooner terminated by either party or extended by a written agreement. If Visiting Fellow's primary academic appointment at JMC ends before the planned end of his visit to EVC, his association with Emory will be automatically ceased unless and otherwise extended.
3. To that effect, Visiting Fellow will be conferred with a letter of invitation, to be a Visiting Fellow at Emory, based on the credentials received from JMC ("Letter of Invitation"). The letter of invitation must be agreed to and signed by five parties (Visiting Fellow, the Visiting Fellow's JMC supervisor, JMC supervisor's chair or center head, the EVC supervisor, the chair or center head of EVC, and authorities at higher hierarchies).
4. This Letter of Invitation will reveal the nature of Visa (J-1), the salary/fellowship, and the coverage including enrolment in a Health Insurance Plan.
5. In as much as JVRC shall provide documents that would be required for purpose of Visa, JMC will supplement these documents with material from Bharathidasan University as may be required.
6. It shall be the responsibility of Visiting Fellow to bear the Visa fee and the cost of international travel, wherein his home institution, JMC, might arrange for these costs.
7. Visiting Fellow shall not be charged tuition fees at the EVC (but may be charged fees at his home institution).
8. As long as Visiting Fellow's association with EVC continues, Visiting Fellow will comply with Emory's statutes and policies applicable to Visiting Fellow, and he will follow the directions and guidance of the EVC Sponsor and other authorized University personnel.
9. Emory shall provide the Visiting Fellow with access to Emory services (e.g. library, e-mail access, computing).
10. Visiting Fellow assumes responsibilities to EVC and must abide by all Emory policies, regulations, rules and procedures including behavior on academic matters, code of conduct, policy on ethical conduct in research, intellectual property guidelines, etc.
11. Anything that happens to Visiting Fellow during his stay in the United States will not be a liability or responsibility of either JMC or Emory.
12. While at Emory, Visiting Fellow may acquire information, data, procedures and techniques that are confidential, proprietary information of Emory University or of third parties to whom Emory has obligations of confidentiality. Visiting Fellow agrees not to disclose such information to others and not to use such information except to the extent necessary in the course of Visiting Fellow's association with Emory and solely for Emory's benefit. The agreement not to disclose does not apply to information that is published, already known to him, or received by him from other non-infringing sources. However, the data generated during the tenure may be used to publish articles but only with expressed permission of the EVC Sponsor.
13. Visiting Fellow hereby assigns to Emory all his rights, title and interest in and to any inventions and discoveries that may arise from research or other activities he carries out at Emory, or with aid of Emory facilities or funds

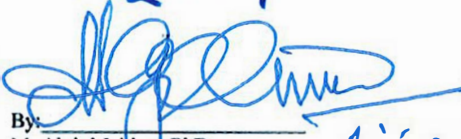
- administered by Emory. Visiting Fellow will cooperate by promptly disclosing to EVC Sponsor such inventions and discoveries and signing such papers and providing such information as are needed to perfect Emory's rights. While at Emory, Visiting Fellow may have access to digital publications, data, information, software and the like that have been licensed to Emory. Visiting Fellow may use these materials only while at Emory and solely to the extent necessary in connection with his association with Emory. Visiting Fellow may not retain copies of any such materials after the expiration of his association.
14. Visiting Fellow will be conducting research with EVC Sponsor on subjects related to Visiting Fellow's Doctoral thesis. Visiting Fellow will be permitted to register for and attend such courses as may be the same or closer to programme (s) prescribed for Ph.D. in Zoology at JMC.
 15. Upon completion of the program period at EVC, Visiting Fellow may request from EVC Sponsor, a letter confirming his visiting fellowship, and/or a letter outlining the research accomplishments.

IN WITNESS WHEREOF, the undersigned hereby execute this MOU as of the dates written below.


By: 
 Dr. Sadiq Bukhari, A.,
 Mentor at JMC

By: 
 Rafi Ahmed, PhD
 Director, EVC

By: 
 Dr. Joseph Antony Jerald, I
 Head of the Department-Zoology, JMC

By: 
 M. Abdul Jabbar, PhD
 Scientific Project Manager, EVC
 April 22, 2024


By: 
 Dr. Ismail Mohideen, S.,
 Principal, JMC

By: 
 Sandra L. Wong, MD, MS
 Dean, School of Medicine

By: 
 Dr. A.K. Khaja Nazeemudeen,
 Secretary and Correspondent, JMC

By:  25 April 2024
 Philip Wainwright, PhD
 Vice Provost, Global Strategy and Initiatives

Acknowledged

By: 
 Umar Sherif, J.
 PhD Scholar, JMC