

INTERNATIONAL FELLOWSHIP

1. Name of fellowship

Genome Engineering/Editing Technology initiative (GETin) Overseas Fellowship 2019-20

2. Funding agency

Department of Biotechnology (DBT), Govt. of India in association with Indo-U.S. Science & Technology Forum (IUSSTF)

3. Duration of the fellowship: 12 months

- Starting date (dd/mm/yyyy): **10/07/2019**
- Completion date (dd/mm/yyyy): **21/06/2020**

Name of the Fellow

Dr. Kesavan Karthikeyan

Assistant Professor

Department of Pharmacy

Guru Ghasidas Vishwavidyalya (A Central University)

Bilaspur, Chhattisgarh 495009



Name of the U.S. Host and affiliation:

Prof. Val C. Sheffield

Medical Genetics, Stead Family Department of Pediatrics

Carver College of Medicine

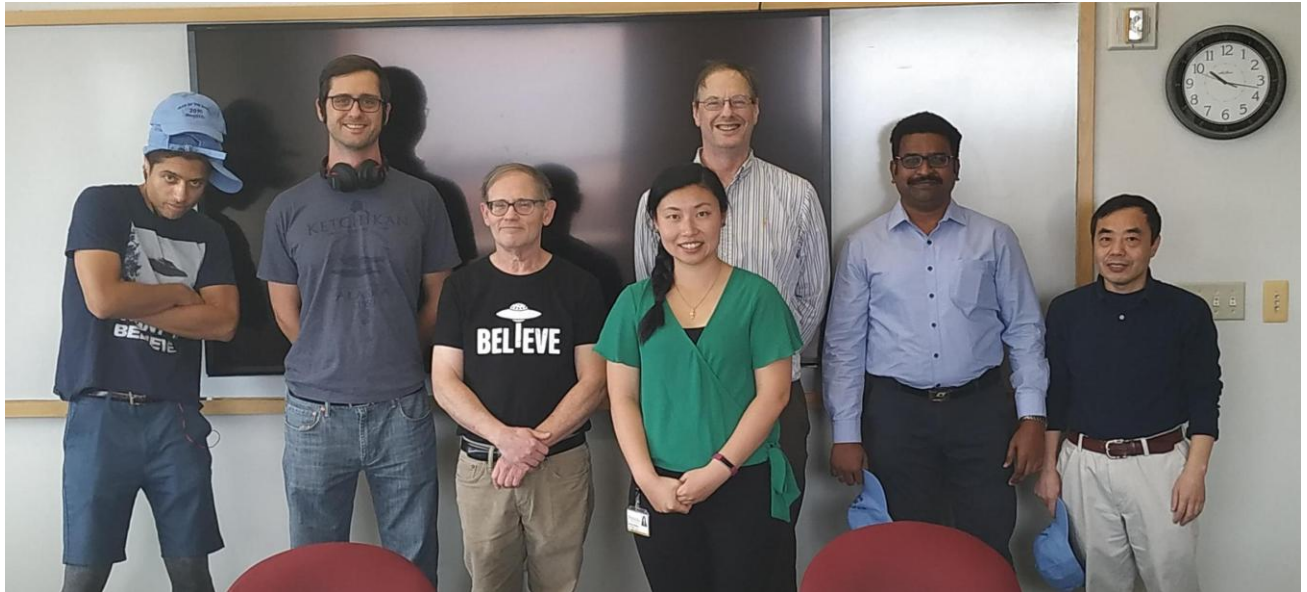
University of Iowa, IA, USA 52246



Title of the research

Cationic Nanocarrier as a Non-Viral Vector in CRISPR-Cas9–Based Genome Editing for Myocilin Associated Glaucoma Therapy

Lab Photos:



Indo-U.S. Science & Technology Forum (IUSSTF)
Fulbright House, 12 Hailey Road
New Delhi-110 001

AWARD LETTER

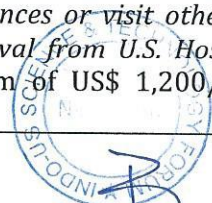
19th June 2019

Ref: Indo-U.S. GETin_Overseas Fellowship_2019_0109/Kesavan Karthikeyan

Subject: Award of Indo-U.S. Science & Technology Forum (IUSSTF) to Dr. Kesavan Karthikeyan, Guru Ghasidas University Chhattisgarh, Bilaspur for Overseas Fellowship program module under the Indo-U.S. Genome Engineering/Editing Technology Initiative (GETin) and subsequent release of grants in the financial year 2019-20.

1. To acknowledge the importance of strategies & techniques in genome modification, as modern day essential tools for research & development, the Department of Biotechnology (DBT), Govt. of India announced a fellowship program between Indian Institutes and premier U.S. Universities, in significant areas of genome engineering/editing technology. The program is administered by the Indo-U.S. Science & Technology Forum (IUSSTF) and is open to individuals whose research work has an interface with genome engineering/editing technology studies.
2. Award of Indo-U.S. Science & Technology Forum (IUSSTF) is hereby accorded to **Dr. Kesavan Karthikeyan, Guru Ghasidas University Chhattisgarh, Bilaspur for Overseas Fellowship program module under the Indo-U.S. Genome Engineering/Editing Technology Initiative (GETin) 2019-20** to undertake research at University of Iowa Roy J. and Lucille A. Carver College of Medicine, Iowa City (IY), USA under the U.S. Host Prof. Val Cowley Sheffield, Professor, Medical Genetics Stead Family Department of Pediatrics and Department of Ophthalmology and Visual Science, Email: val-sheffield@uiowa.edu for an approved period of twelve (12) months.
3. The **fellowship** will commence by **12th July 2019** (tentative). The awardee of the fellowship will be called as "**Indo-U.S. GETin Fellow**". The grant-in-aid is subject to the guidelines governing "Indo-U.S. GETin Overseas Fellowship" program. The budget approved by IUSSTF for subject award is as follows:-

S. No.	Budget Heads	Amount (Rs.)
1.	International air-ticket cost for travel to U.S. & back <i>(Air-tickets will be directly provided by the IUSSTF travel desk by economy class and shortest route)</i>	1,75,000
2.	Stipend @ US\$ 3,000 for approved duration of 12 months only US\$ 3,000 x 12 months = US\$ 36,000; US\$ 36,000 x Rs. 70 = Rs. 25,20,000 <i>(90% of Stipend amount Rs. 22,68,000 is being made available in advance to the Fellow through her Parent Organization; balance 10% would be released at the time of grant settlement)</i>	25,20,000
3.	Health Insurance* at a maximum of US\$ 1,000 or at actuals <i>(The amount will be disbursed at actuals against the supporting vouchers/receipts at the time of grant settlement)</i>	70,000
4.	Contingency grant* will be reimbursed up to a maximum of US\$ 1,000 only equivalent to Rs. 70,000 <i>(Contingency grant is provided to cover the expenses including orientation, mentorship, field trips, U.S. Visa fees, SEVIS fee, airport transfers, bank commission etc. The expenditure should be supported with the vouchers/receipts. 50% of the Contingency grant i.e. Rs. 35,000 is being released as an advance and balance amount will be settled at actuals after submission of vouchers/receipts)</i>	70,000
5.	Conference Contingency grant* (to attend conferences or visit other institutes of interest within USA seeking prior approval from U.S. Host and IUSSTF) will be reimbursed up to a maximum of US\$ 1,200/- equivalent to Rs. 84,000	84,000



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6.	Total amount of grant budgeted for funding Indo-U.S. GETin Fellow Dr. Kesavan Karthikeyan by IUSSTF (S. No-1-5)	29,19,000
7.	Equivalent in US \$	\$ 41,700

Exchange Conversion rate as on 19.06.2019: 1 US\$ = Rs.70/-

4. An advance grant-in-aid is being released to Indo-U.S. GETin Fellow vide Award letter dated 19.06.2019 is as follows:

S. No.	Budget Heads	Amount(Rs.)
i.	Monthly Stipend (90% of total stipend amount of Rs. 25,20,000 i.e. Rs. 22,68,000)	22,68,000
ii.	Contingency Grant (50% of the Contingency 70,000 i.e. Rs. 35,000)	35,000
Total Advance grant-in-aid to be released to the Indo-U.S. GETin Fellow through her Parent Organization "Guru Ghasidas Vishwavidalaya" as per the IUSSTF Award Letter by RTGS bank transfer		23,03,000

5. **Rs. 23,03,000 (Rupees Twenty three lakhs and three thousand only)** is being released by RTGS transfer as per following details submitted by the Indo-U.S. GETin Fellow:

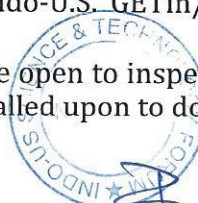
Name of the Beneficiary	:	Registrar, Guru Ghasidas Vishwavidalaya
Account Number	:	7190000100002574
Account Type	:	Saving
Bank Name and Address	:	Punjab National Bank, Koni, Guru Ghasidas Vishwavidalaya Campus, Bilaspur, Chhattisgarh 495 009
IFSC Code Number	:	PUNB0719000
9-digit Code of Bank and Branch	:	495024007
Amount	:	Rs. 23,03,000 (Rupees Twenty three lakhs and three thousand only)

Note: (i) The grants as per the Award letter is being released to the Indo-U.S. GETin Fellow on the prevailing foreign exchange rate. Any difference in exchange rate will be reimbursed by IUSSTF after completion of the fellowship and on submission of UC/SE supported by the forex receipts. The UC/SE will be accepted only on submission of foreign exchange conversion receipt.

(ii) Balance 10% Stipend will be released at the time of submission of UC/SE along with balance Contingency, Conference Contingency and Health Insurance grants.

The Indo-U.S. GETin Fellow may please note the following towards strict compliance:

- Due recognition to the DBT and IUSSTF has to made in all scientific publications, presentations etc. by the Indo-U.S. GETin Fellow.
- Grantee Institution i.e. 'Guru Ghasidas Vishwavidalaya' must submit a Utilization certificate and Statement of Expenditure (UC/SE) for the grants received from the Indo-U.S. S&T Forum on completion of fellowship period. The balance grants would be settled upon submission of UC/SE. The formats for UC/SE will be provided at the time of grant release.
- Submit original flight boarding passes and a Certificate of Participation (format will be shared) to certify travel on tickets issued through IUSSTF travel desk.
- All the relevant documents/ reports/ formats as placed in the booklet on 'General Information' have to be submitted by the Indo-U.S. GETin/ Grantee Institution to Indo-U.S. S&T Forum.
- The accounts of the Grantee Institution shall be open to inspection by the sanctioning authority/ audit, whenever the institution is called upon to do so.



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- vi. Any unspent amount of grants will have to be refunded to "Indo-U.S. S&T Forum" by a cheque/demand draft payable at par in New Delhi.

Disclaimer:

1. All grant-in-aid Awards are subject to availability of funding, either from internal resources or external agencies, as the case may be.
2. IUSSTF is not responsible if the funding agency, at any given point of time, withdraws the funding support to the program due to unforeseen exigencies; or for any delays in fund release arising due to delayed receipt of funds from the funding agency.
3. No damages, direct or indirect, caused due to any eventualities during work, stay and travel, such as an accident, injury or illness shall be attributed to IUSSTF during the course of implementation of the Award or any period preceding/ succeeding the Award.
4. IUSSTF reserves the right to amend its policies and priorities anytime, depending on circumstances, and such decisions shall be binding for all Awards.
5. As the Indo-U.S. GETin Program is funded by the Department of Biotechnology (DBT); the Grantee Institution/Awardee/Fellow/Intern will be governed by the DBT's overarching framework of prevailing regulations and policies (such as the Open Access Policy) to the extent applicable.

 (R. Varadarajan)
Controller

Copy to:

1. Dr. Kesavan Karthikeyan, Assistant Professor, Guru Ghasidas University Chhattisgarh, Bilaspur (Indo-U.S. GETin Fellow)
2. Prof. Val Cowley Sheffield, Professor, Department of Medical Genetics Stead Family Department of Pediatrics and Department of Ophthalmology and Visual Science, University of Iowa Roy J. and Lucille A. Carver College of Medicine, Iowa City (IA), Email Id: val-sheffield@uiowa.edu (U.S. Host)
3. Registrar, Guru Ghasidas University Chhattisgarh, Bilaspur (Email: ggv.registrar@gmail.com) - For kind release of grants to Indo-U.S. GETin Fellow
4. Fellow's file.

 (R. Varadarajan)
Controller

Kesavan Karthikeyan, Ph.D.
Assistant Professor

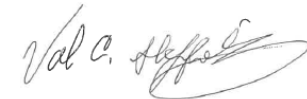
SLT Institute of Pharmaceutical Sciences
Guru Ghasidas University, India

Successfully Completed a 1-Year Appointment as Visiting Faculty in the
Division of Medical Genetics and Genomics, Department of Pediatrics
University of Iowa Carver College of Medicine

sponsored by

Indo-U.S. Genome Engineering/Editing Technology Initiative (*GETin*)

10 July 2019 to 21 June 2020



Val C. Sheffield, M.D., Ph.D.
Professor of Pediatrics
Director, Host Laboratory