One Day State Level Seminar

on

AbhiSCoVac: a journey to discover a universal vaccine against COVID-19

Resource Person:
Dr. Suprabhat Mukherjee
Assistant Professor
Department of Animal Science
&
Department of Allied-
Health Science & Technology (HOD)
Kazi Nazrul University, Asansol
West Bengal, India

Department of Zoology

in

collaboration with IQAC

Polba Mahavidyalaya

Polba, Hooghly, PIN-712148

15.03.2023

22.03.2023

To
The Teacher-in-Charge
Polba Mahavidyalaya
Polba, Hooghly
Pin- 712148

Sub: Seeking permission to organize a one-day State Level Seminar on AbhiSCo Vac: A journey to discover a universal vaccine against COVID-19

Respected Sir,

With due respect, I, on behalf of Department of Zoology in collaboration with IQAC, Polba Mahavidyalaya, would like to request your kind permission to organize a one-day State Level Seminar on "**AbhiSCo Vac: A journey to discover a universal vaccine against COVID-19**" in the college premises. The proposed date of the said seminar is tentatively 15th March 2023. The date would be finalized accordingly to the convenience of the Resource Person.

- Proposed Resource Person: Dr. Suprabhat Mukherjee
- Proposed Budget:
  - Resource Person Honorarium: Rs. 1000/-

Hope you would be kind enough to provide your administrative and financial permission for the forthcoming Seminar.

Thanks and Regards,

Dr. Kousik Roy
Kousik Roy
09.03.2023
Assistant professor & HOD
Dept. of Zoology
Polba Mahavidyalaya
Polba, Hooghly
712148

Allowed.
10/3/2023.

22.03.2023

POLBA MAHAVIDYALAYA

(AFFILIATED TO THE UNIVERSITY OF BURDWAN)

Polba, Hooghly, Pin-712148

To
Dr. Suprabhat Mukherjee
Assistant Professor
Department of Animal Science
Kazi Nazrul University
Asansol- 713340
West Bengal

Sub: Invitation to deliver a speech as a Resource Person in a One-day State Level Seminar on
"AbhiSCo Vac: A journey to discover a universal vaccine against COVID-19"

Sir,
We feel happy to announce that the Department of Zoology in collaboration with IQAC, Polba Mahavidyalaya is going to organize a "One-Day State Level Seminar on **"AbhiSCo Vac: A journey to discover a universal vaccine against COVID-19"** on 15th March 2023 from 12:00 noon at the College Premises.

On this occasion, on behalf of our Institute, I cordially invite you to deliver one-hour lecture as a very distinguished Resource Person.

Intimation from your end as confirmation would be highly appreciated.

Thanking you,

With Regards,

Mr. Narugopal kaibarta
10/3/2023
Teacher-in-Charge
Polba Mahavidyalaya
Polba , Hooghly
Pin- 712148

22.03.2023

Teacher in Charge
Polba Mahavidyalaya
Polba, Hooghly, West Bengal

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Ref. No. _____ Date:10.03.2023

Notice

All Teaching, Non-Teaching Staff and Students of Polba Mahavidyalaya are hereby informed that Department of Zoology in collaboration with IQAC is going to organize a One Day State Level Seminar on " AbhiSCoVac: a journey to discover a universal vaccine against COVID-19" on 15.03.2023 at the College premises.

All are requested to be present on this Occasion positively.

Coordinator
IQAC

10/3/2023.
Teacher-in-Charge

Teacher in Charge
Polba Mahavidyalaya
Polba, Hooghly, West Bengal

22.3.23

Programme Schedule of One Day State Level Seminar

On

AbhiSCoVac: A Journey to discover a universal vaccine against COVID19

Date: 15.03.2023

Venue: Polba Mahavidyalaya (Room no. 202)

Inaugural Session: 12.00 pm – 12.30 pm

- Sloka on Mangalacharan by Dr. Preetam Mondal , Dept. of Sanskrit
- Objectives of the seminar by Mrs. Soumali Ghosh, Dept. of Zoology
- Lighting of lamp
- Introduction and felicitation to distinguished resource persons
- Inaugural speech by Mr. Narugopal kaibarta, TIC, Polba Mahavidyalaya
- Speech by IQAC Cordinator, Dr. Santanu Sengupta, Dept. Of History

Key note speech: 12.30 pm – 12.45 pm

Dr. Kousik Roy

Technical session:

- Speech: 12.45 pm – 2.20 pm
- Discussion: 2.20 pm -2.30 pm

Valedictory Session: 2.30 pm -2.45 pm

- Vote of thanks: Mrs. Soumali Ghosh, Dept of zoology
- Feedback from the participants

22.03.23

One Day State Level Seminar

On

AbhiSCoVac: a journey to discover a universal vaccine against COVID-19

Objective of the Seminar:

1. **Education**: To provide participants with comprehensive knowledge about the on-going efforts to develop a universal vaccine against COVID-19. This includes understanding the current landscape of COVID-19 vaccines, the challenges involved, and the potential benefits of a universal vaccine.

2. **Awareness**: To raise awareness about the importance of finding a universal vaccine against COVID-19. This involves highlighting the significance of such a vaccine in controlling the pandemic, preventing future outbreaks, and ensuring global health security.

3. **Research**: To foster discussions and collaborations among researchers, scientists, and stakeholders involved in vaccine development. This includes sharing insights, latest research findings, and potential strategies for overcoming obstacles in the quest for a universal COVID-19 vaccine.

4. **Innovation**: To explore innovative approaches and technologies in vaccine design and development. This may involve discussing novel vaccine platforms, adjuvants, delivery systems, and other emerging trends that could accelerate the development of a universal COVID-19 vaccine.

5. **Global Collaboration**: To emphasize the importance of international cooperation and collaboration in addressing global health challenges such as COVID-19. This includes promoting knowledge sharing, resource mobilization and equitable access to vaccines across different countries and regions.

6. **Policy Implications**: To examine the policy implications of developing and deploying a universal COVID-19 vaccine. This involves discussing regulatory frameworks, ethical considerations, funding mechanisms, and strategies for vaccine distribution and deployment on a global scale.

Overall, the seminar aims to provide a platform for stakeholders to exchange ideas, share insights, and chart a collective path forward in the pursuit of a universal vaccine against COVID-19.

22.03.23

Short Report of the Seminar

Title: "AbhiSCoVac: A Journey to Discover a Universal Vaccine against COVID-19"

Date: 15.03.2023

Venue: Polba Mahavidyalaya (Room no. 202)

Summary:

The seminar on "AbhiSCoVac: A Journey to Discover a Universal Vaccine Against COVID-19" convened with the aim of exploring advancements in vaccine development towards achieving universal protection against COVID-19 variants.

Key Points:

1. **Introduction to AbhiSCoVac**: Presenters provided an overview of the AbhiSCoVac project, detailing its objectives, methodology, and collaborative efforts involving scientists, researchers, and pharmaceutical companies.
2. **Understanding COVID-19 Variants**: Discussions centered on the evolution of COVID-19 variants and their implications for vaccine effectiveness. Insights were shared on genomic surveillance, variant detection, and strategies to address emerging mutations.
3. **Design and Development of Universal Vaccines**: Experts elaborated on the principles and approaches underlying the design and development of universal vaccines targeting conserved regions of the virus. Preclinical and clinical studies evaluating candidate vaccines were highlighted.
4. **Immune Response and Cross-Protection**: Presentations focused on understanding the immune response elicited by universal vaccines and their potential for cross-protection against diverse strains of SARS-CoV-2. Insights from immunological studies and animal models were discussed.
5. **Challenges and Future Directions**: The seminar addressed challenges such as vaccine manufacturing scalability, regulatory approval processes, and equitable distribution. Future directions for research, including vaccine optimization and booster strategies, were also outlined.

Conclusion:

The seminar on "AbhiSCoVac: A Journey to Discover a Universal Vaccine against COVID-19" provided a comprehensive overview of efforts to develop a universal vaccine capable of conferring broad protection against COVID-19 variants. Collaboration among stakeholders, rigorous research, and innovation are essential in the quest for effective solutions to combat the pandemic.

22.03.2023

AbhiSCoVac: a journey to discover a universal vaccine against COVID-19

Write up of the delivered topic:

Coronavirus disease-19 (COVID-19) caused by SARS-CoV-2 is presently the biggest threat to mankind throughout the globe. Increasing reports on deaths, cases of new infection, and socioeconomic losses are continuously coming from all parts of the world. Developing an efficacious drug and/or vaccine is currently the major goal to the scientific communities. In this context, toll-like receptors (TLRs) could be the useful targets in adopting effective therapeutic approaches.

The coronaviridae family has generated highly virulent viruses, including the ones responsible for three major pandemics in last two decades with SARS in 2002, MERS outbreak in 2012 and the current nCOVID19 crisis that has turned the world breadthless. Future outbreaks are also a plausible threat to mankind. As computational biologists, we are committed to address the need for a universal vaccine that can deter all these pathogenic viruses in a single shot. Notably, the spike proteins present in all these viruses function as credible PAMPs that are majorly sensed by human TLR4 receptors. Our study aims to recognize the amino acid sequence(s) of the viral spike proteins that are precisely responsible for interaction with human TLR4 and to screen the immunogenic epitopes present in them to develop a multiepitope multi-target chimeric vaccine against the coronaviruses. Molecular design of the constructed vaccine peptide is qualified in silico; additionally, molecular docking and molecular dynamics simulation studies collectively reveal strong and stable interactions of the vaccine construct with TLRs and MHC receptors. In silico cloning is performed for proficient expression in bacterial systems. *In silico* immune simulation of the vaccine indicates highly immunogenic nature of the vaccine construct without any allergic response. The present biocomputational study hereby innovates a vaccine candidate - AbhiSCoVac hypothesized as a potent remedy to combat all the virulent forms of coronaviruses. Hitherto, a number of multi-subunit peptide-based vaccines and pharmacological agents developed against SARS-CoV-2 have been found to manipulate TLR function. However, our proposed vaccine is unique in the sense is that the vaccine is expected to trigger TLR function as well as it will signal T cell activation and antibody generation.

22.03.23

POLBA MAHAVIDYALAYA

POLBA, HOOGHLY, PIN-712148

Department of Zoology

One-Day Departmental Level Seminar on

15th March, 2023

SL. no	Name	Semester	Roll Number	Subject	Signature
1.	Deep Dhara	1st	805	Botany	Deep Dhara
2.	Sweta Sadhukhan	1st	804	Zoology	Sweta Sadhukhan
3.	Sayani Das	1st	802	Zoology	Sayani Das
4.	Zeba Hasna	1st	810	Zoology	Zeba Hasna
5.	Riya Das.	1st	803	Zoology	Riya Das.
6.	NAZMA SULTANA	1st	809	Zoology	Nazma Sultana
7.	SANIYA SULTANA	1st	801	Zoology	saniya sultana.
8.	Isha Das	5th	851	Zoology	Isha Das
9.	Keya Das	5th	852	Zoology	Keya Das
10.	Babita Ghosh	5th	1053	General (Edu)	Babita Ghosh
11.	Pranjit Dutta	3th	801	Chemistry	Pranjit Dutta
12	RIYA MURMU	5th	407	History	Riya murmu
13	Raj Sarkar	5th	406	History	Raj Sarkar
14.	Rahul Roy	5th	1134	General	Rahul Roy
15.	Debi Chakraborty	5th	1013	General	Debi Chakraba
16.	Samima Khatun	5th	1006	General	Samima Khatun
17.	Priya Khawra	1st	1116	Education(M)	Priya Khawra.
18.	Deblina Sadhukhan	1st	107	Education	D. S
19.	Mahabuba Khatun	1st	17	Bengali	M. K
20.	Sahiba Khatun	1st	1018	Bengali.	S. K
21.	Habiba Khatun	1st	16	Bengali	H. K
22.	Pritu Karmakar.	5th	1003	Education	P. Karmakar.
23.	Asifa Sultana	5th	1001	Education	A-Sultana
24.	Bornali Banerjee	5th	1014	Education	B. Banerjee
25.	Tamanna Tabassum	5th	1010	Education	T. Tabassum
26.	Simran Parvin	5th	1008	Education	S. Parvin
27.	Kankana Bhowmik	5th	107	Education	K. Bhowmik
28.	Subhra Santra	1st	405	History	S. S
29.	Rupsa Kanthali	1st	406	History	R. K
30.	Bahni Chatterjee	1st	701	Sanskrit	B. C.
31.	Tina Ghosh	1st	703	Sanskrit	T. G
32.	Nilabhra Halder	1st	208	English	N. H

22.03.23

33.	Disha Dutta	3rd	308	Geography	D.D
34	Sukanya Saha	3rd	305	Geography	S.S
35	Nandita Muzumdar	3rd	309	Geography	N.M

22.03.23

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Ref. No._____ Date: 15-03-2023

To whom it may concern

This is to state that Dr. Suprabhat Mukherjee, Assistant Professor, Department of Animal Science; Coordinator, Department of Allied Health Science and Technology, Kazi Nazrul University, Asansol delivered a seminar lecture titled "*AbhiSCoVac: A Journey to Discover a Universal Vaccine Against COVID-19*" as a distinguished resource person at Polba Mahavidyalaya on 15-03-2023.

We appreciate his adept articulation and profound knowledge which not only enriched the young minds of those present but also left a profound and lasting impression. We are grateful for his painstaking efforts in enhancing the standard of education at our institution.

15/03/2023.

Teacher in Charge
Polba Mahavidyalaya
Polba, Hooghly, West Bengal

POLBA MAHAVIDYALAYA Estd-2005 Dist.-Hooghly

Bill

Received Rs.1,000/- (Rupees One Thousand only) from Polba Mahavidyalaya as Honorarium for attending Seminar as Resource Person organized by the Department of Zoology, Polba Mahavidyalaya on .....

Full Name : Dr. Suprabhat Mukherjee

Signature :

22.03.23


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X875+5QQ, Polba, West Bengal 712148, India
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Long 88.309423°
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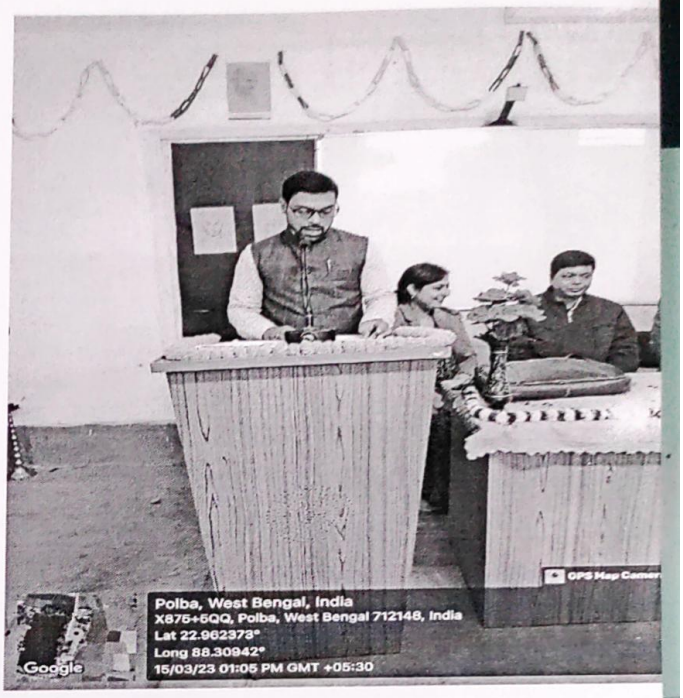
Google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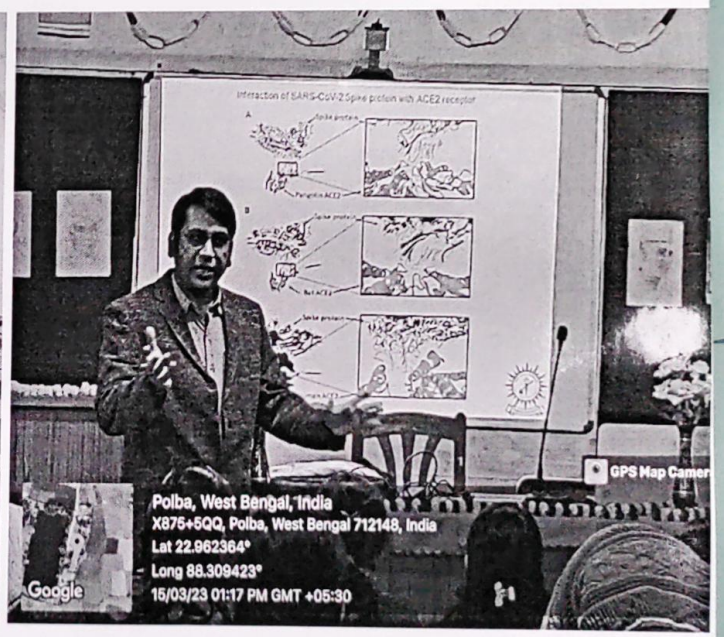
Interaction of SARS-CoV-2 Spike protein with ACE2 receptor
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