



Pakistan Biological Safety Association

PBSA MAGAZINE - VOLUME 1



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PBSA.PAK@GMAIL.COM

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DR. SAEED KHAN

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DR. ALI AKBAR

Message from the President

**No one is safe until
everyone is safe.**



I believe that promoting awareness, knowledge, and understanding of biosafety at the regional and national levels is the responsibility of each member and trainer of the PBSA. This organization is commended in many of the national and international forums for its preventive training for Risk Assessment and management, which was much needed at the time of the COVID-19 outbreak. Additionally, it has promoted strong collaborations and affiliations with various Biosafety developmental programs that align with international standards to acknowledge and recognize biosafety as a separate scientific discipline within Pakistan. I would like to work with the PBSA team to implement this approach as far and wide as possible.

PBSA MAGAZINE - VOLUME ONE

TABLE OF CONTENTS

PBSA PUBLICATION & REVIEW COMMITTEE	(1)
HIGHLIGHTS OF THE YEAR	(2)
DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY	(3)
A JOURNEY THROUGH TIME	(4)
THE IMPACT OF PBSA	(7)
PBSA AND FIC	(8)
EXPERT TESTIMONIALS	(9)
PBSA ACTIVITIES	(10)
PBSA BIOPRISM	(15)
TRAIN THE TRAINER WORKSHOPS	(16)
LEADERSHIP TIPS FOR BIOSAFETY AND BIOSECURITY MANAGERS	(20)
PBSA CHAPTER ACTIVITIES	(21)
RECENT EVENTS	(30)
OUR TEAM	(32)

PBSA PUBLICATION & REVIEW COMMITTEE

2023

Dear Readers,

We are delighted to introduce the esteemed members of the PBSA Publication and Review Committee. This diverse and accomplished group of professionals has been instrumental in shaping the content and ensuring the highest standards of quality in the field of biosafety and biosecurity.

Allow us to present the esteemed members of our Publication and Review Committee:

CONVENOR

Dr. Saima Saleem - Dr. A.Q. Khan Institute of Biotechnology & Genetic Engineering (KIBGE), University of Karachi

MAGAZINE DEVELOPER/ EDITOR-IN-CHIEF

Ms. Hajra Waheed - Pakistan Biological Safety Association

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- Dr. Muhammad Ali Quaid-e-Azam University, Islamabad
- Dr. Hafsa Muhammad Khyber Medical University, Peshawar
- Mr. Furqan Kabir Aga Khan University, Karachi

With their profound expertise and valuable contributions, our committee members have ensured that the PBSA Magazine- Volume One meets the highest standards of excellence. We extend our heartfelt appreciation to each member for their dedication and commitment to PBSA.

Stay tuned for an engaging and insightful edition of the PBSA Magazine, where you will discover thought-provoking articles, gain insights into chapter activities, and stay updated with the latest groundbreaking projects undertaken by PBSA.

Thank you for your continued support and interest in our endeavors.

-Pakistan Biological Safety Association

HIGHLIGHTS OF THE YEAR

2022-2023



REGISTERED WITH THE PAKISTAN SCIENCE
FOUNDATION



GAINED 231 NEW LIFETIME MEMBERS



CONDUCTED 11 DIFFERENT IN-PERSON
WORKSHOPS ACROSS PAKISTAN



TRAINED 376 PARTICIPANTS IN WORKSHOPS



ENGAGED NEARLY 3500 PARTICIPANTS
THROUGH CHAPTER ACTIVITIES



SUPPORTED 44 ACTIVITIES ACROSS SEVEN
CHAPTERS, INCLUDING 6 TOT WORKSHOPS



SUPPORTED 97 PAKISTANI PROFESSIONALS TO
SECURE AN IFBA CERTIFICATION



SUBMITTED 9 NEW PROPOSALS TO PROCURE
FUTURE FUNDINGS

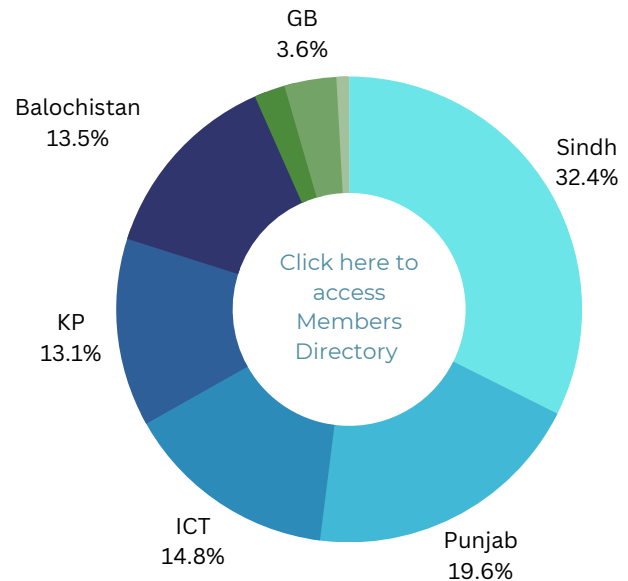
PBSA is grateful to its patrons, members, and partners for their invaluable contributions in achieving these numbers over the year.

DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY

2023

LIFETIME MEMBERS

PBSA has been making significant efforts towards promoting Diversity, Equity, Inclusion, and Accessibility in the field of biological safety. The association has conducted several workshops across the country, with a particular focus on marginalized communities. The team has gone the extra mile by traveling to remote areas of the country to ensure that their training programs are accessible. PBSA is a diverse community with members from all over Pakistan.

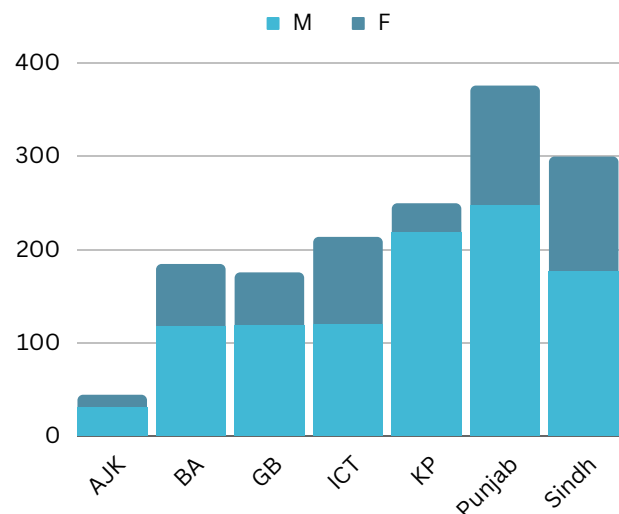


Regional Distribution of PBSA Lifetime Members (2023)

FEMALE PARTICIPATION

PBSA promotes gender equality by offering equal opportunities to all its members. It has actively increased female participation in its training workshops, both as participants and facilitators, resulting in a cumulative of 33% of women participants from 2014 to March 2023 compared to 23% in the year 2014. Despite significant progress, there is still work to be done to achieve true gender equality.

PBSA acknowledges that gender diversity in leadership roles not only contributes to a more inclusive workplace culture but also brings a diversity of perspectives, experiences, and skills. PBSA, in collaboration with its partners, aims to empower women from marginalized communities who may face additional barriers to participation. PBSA aims to empower women to take on leadership roles and pave the way for a more equitable and sustainable future.



Cumulative Male and Female Participation from 2014 to March 2023



A JOURNEY THROUGH TIME

2023

Exploring Pakistan's Biosafety Milestones

"The Pakistan Biological Safety Association (PBSA) is a professional organization dedicated to promote the safe handling and use of biological materials in Pakistan.



Top row (left to right): Dr. Summiya Nizamuddin, Ms. Maqboola Dojki, Ms. Shahida Mumtaz Qureshi, Dr Anwar Ali Siddiqui

Bottom row (left to right): Prof. Dr. Shamsul Arfin Qasmi, Prof. Dr. Aamer Ikram, Prof. Dr. Anwar Naseem, Mr. Adel Zaki, Prof. Dr. Erum Khan, Prof. Dr. Elnasir Lalani

Origins of the PBSA

In 2007, a group of researchers and biosafety experts recognized the need for a national organization in Pakistan to provide guidance and support for those working with biological materials. Under the leadership of Dr. Anwar Nasim, the first Pakistani molecular biologist and geneticist, and Patron In-Chief of PBSA, the idea for the association was born. The founding group included Prof. Dr. Erum Khan, Prof. Dr. Shamsul Arfin Qasmi, Ms. Shahida Qureshi, and Ms. Maqboola Dojki, who were elected as President, General Secretary, Finance Secretary, and member, respectively. Together, they developed a mission statement, bylaws, and a plan of action for the association. As the organization grew, representatives from universities, research institutions, and government agencies joined their cause. With the support of the Pakistan Biological Safety Program, a joint initiative of the government and PBSA, the association was officially launched in 2008. Professionals from diverse backgrounds attended the inaugural meeting held at COMSTECH Islamabad. Thus, the PBSA embarked on a journey of advancing biosafety in Pakistan, paving the way for a safer and more secure handling of biological materials.

Continued...

A JOURNEY THROUGH TIME

2023

Continued...

Early Years

The need for an organization like the PBSA became evident in the early 2000s when Pakistan was hit by several outbreaks of infectious diseases, including SARS, avian influenza, and the H1N1 flu virus. In addition to this the 2001 anthrax attacks, also known as Amerithrax, occurred in the United States over the course of several weeks beginning on September 18, 2001, one week after the September 11 200 terrorist attacks. These outbreaks and attacks of bioterrorism highlighted the urgent need for better biosafety and biosecurity measures in the country as an international obligation and national requirement to stand as a responsible nation. In response to these challenges, a group of professionals from different fields, including microbiology, virology, and public health, came together to form the PBSA. In its early years, the PBSA focused on raising awareness, providing training, and developing regulations for biological safety. They organized workshops, conferences, and training sessions. Despite limited resources, the dedicated leadership spearheaded the establishment of the association and promoted biosafety at the national level. They also worked with the government's task force to create a regulatory framework for biosafety and biosecurity.



Former President Dr. Aamer Ikram with the PBSA and FIC Team

Expansion and Growth

In the years since its founding, PBSA has continued to expand its reach and influence in Pakistan and beyond. Meanwhile, PBSA was going through an evolution and having general elections every three years for two terms, and then after mutual resolution the tenure was limited to two years for the office bearers. The new leadership comprising Prof. Dr. Aamer Ikram NIH Pakistan as president took oath in 2016 put new life into its existence and during his six years tenure, he was able to develop partnerships with other international biosafety organizations and has played an active role in promoting global biosafety initiatives. PBSA's focus has broadened to include biosecurity, bioethics, and addressing emerging challenges. Workshops, conferences, and collaborations with trainers and government agencies have been instrumental. PBSA's success is evident in Pakistan having the second most IFBA Professional Certifications in Biorisk Management globally.

Continued...

A JOURNEY THROUGH TIME

2023

Continued...

Looking Ahead

Today, the PBSA is a thriving organization with a strong reputation for leadership and expertise in the field of biological safety. Currently, it is led by Prof. Dr. Saeed Khan (DUHS) as President, Muhammad Javed (UOH) as General Secretary, and Ali Akbar (UOB) as Finance Secretary supported by provincial chapter head from all over Pakistan. As the world faces new biological threats, the PBSA continues its work to cultivate a culture of safety and responsibility. Dedicated members and a commitment to excellence ensure its pivotal role in shaping the future of biological safety in Pakistan and beyond.

Initially, the PBSA focused on raising awareness among healthcare professionals, researchers, and lab workers. Through workshops, training, and conferences, it educated them on safe material handling and lab safety.

As the association grew in size and influence, it began to collaborate with international organizations such as the World Health Organization (WHO), Health Security Partners (HSP), CRDF, BEP Dept of State USA, the Centers for Disease Control and Prevention (CDC), FIC, NIH USA to promote and implement biosafety and biosecurity at the national level. It will be worth mentioning here that Dr. Zeba Rasmussen Research Fellow at FIC, NIH USA, played a pivotal role in providing resources and logistics for training the local life scientists in the field of Biosafety & Biosecurity which put a new life in the endeavours of PBSA to stand as professional organization strong on its ground.

A significant achievement was the development of the comprehensive Biosafety and Biosecurity Guide Book 2013 and the Biosafety manual Bioprism for Laboratories in Pakistan. These widely adopted manuals offer guidelines for safe biological material handling. The PBSA expanded its reach to agriculture, veterinary science, and environmental science. It raises awareness about emerging infectious diseases, bioterrorism, and lab accidents. With over 1000 life members including scientists, researchers, healthcare professionals, and officials, the PBSA is a leading authority in biosafety and biosecurity in Pakistan. It promotes excellence through training, education, and advocacy.

In conclusion, since its establishment in 2008, the PBSA has been dynamic in promoting biosafety and biosecurity in Pakistan. It fosters awareness, establishes regulations, develops guidelines, and serves as a driving force for public health and safety."

Prof. Dr. Shamsul Arfin Qasmi PhD
CBSP ABSA, RBP ABSA, CBSP IFBA
Board of Governors
Pakistan Biological Safety Association



THE IMPACT OF PBSA

2023



As a founding member, it is heartening to see how PBSA continues to deliver its commitment. It started as a small group of like-minded professionals dedicated to disseminating comprehensive knowledge related to Biosafety issues in Pakistan, and to training laboratory staff and scientists in new skills of biological safety risk assessment and its mitigation through the implementation of safe practices and protocols. Its main objective has been to empower the laboratory staff to advocate for safe practices and to create new opportunities in this field.

Today I am so proud to see that in its 13th year in making PBSA stands tall, in the delivery of its commitment. Today it is recognized as one of the most vibrant and academically stimulating young professional associations that have achieved outstanding milestones of imparting training to up to 1400 professionals with nearly 1000 life members to its credit. It has branched out into provincial chapters that are now led by certified biosafety professionals, the product of their own program.

One of the biggest successes of PBSA advocacy is the recognition of Institutional Biosafety Committees as an essential requirement for research academic and professional bodies in Pakistan such as the Higher Education Commission, and the Pakistan National Accreditation Council. This has opened new opportunities for biosafety professionals in the form of biosafety officers. These milestones may not have been possible without constant support from its national and international collaborators such as the National Institute of Health- Islamabad and Fogarty International. These collaborations helped in developing up to 150 training workshops with curricula at par with international standards and certification. I wish PBSA all the success as it strives towards excellence.



Prof. Dr. Erum Khan
Aga Khan University, Karachi
Founding Member, First President
Pakistan Biological Safety Association



PBSA AND FIC

2023

"The Fogarty International Center (FIC), part of the U.S. National Institutes of Health (NIH), started formally collaborating with the Pakistan Biological Safety Association (PBSA) in 2014. Together, FIC, consultants, and PBSA created curricula for multiple workshops including Biosafety Awareness, Training of Trainers, Master Trainers, Mock Laboratory ("wet workshops"), Waste Management, Safe Use of Biosafety Cabinets, Responsible Conduct in the Life Sciences, Influence Without Authority, Principles of High Reliability Organization, and introduction of ISO35001 Biorisk Management. A national network of nearly 75 PBSA master trainers was developed. Between December 2014 and December 2019, FIC and PBSA conducted 51 workshops and trained nearly 1000 scientists from 80 cities and 342 institutions. During lockdowns due to the COVID-19 pandemic, virtual sessions were developed on use of masks, decontamination and disinfection, clinical containment, and resilience. The collaboration currently involves projects on strengthening of institutional biosafety committees, personnel reliability, responsible conduct in genomic sciences, development of a national ISO 35001 certification program, and efforts to help veterinary universities create plans for ISO 35001 certification. This has been a productive collaboration and we look forward to its continuation."



Dr. Zeba Rasmussen
Contractor
Division of International
Epidemiology and
Population Studies
Fogarty International
Center, NIH
USA

To find out more about
the recent PBSA-FIC
collaborative efforts, visit

<https://pbsa.org.pk/event-s-pbsa/>



EXPERTS' TESTIMONIALS

2023



TIM TREVAN
FOUNDER
CHROME CONSULTING,
USA

Congratulations PBSA on your 15th anniversary. Witnessing your journey from a startup to an impactful global force is truly inspiring. PBSA stands at the forefront in Pakistan, offering cutting-edge training, expert advice, and informed debates on biorisk management. It addresses safety, security, and current/future challenges, fostering a commitment to responsible research and the ethical exploration of biology. Each year, your reach expands, engaging more scientists, institutions, and covering wider geographic areas. Keep up your stellar work!

As an international observer since 2011, I find it remarkable that the successive presidents and office bearers have consistently upheld and developed the founders' vision. This dedication is evident in the training system, which started with practical awareness training and evolved into a structured approach supported by selected Pakistani trainers trained by international experts. The training programs now cover not only practical aspects of laboratory biosafety but also behavioral, cultural, and management aspects, allowing more laboratory personnel and managers throughout the country to benefit from the training. This is an impressive ongoing challenge in such a vast country with numerous institutions and biomedical laboratories. On a personal note, it has been a pleasure for me to work with dedicated and highly motivated individuals and contribute to PBSA's efforts.



DR. PHILIPPE STROOT
FOUNDER
XIBIOS BIOSAFETY
CONSULTING, BELGIUM



SEAN KAUFMAN
CEO/FOUNDING MEMBER
SAFER BEHAVIORS, USA

The Pakistan Biological Safety Association (PBSA) is a team of dedicated professionals who share a vision to prepare and protect those serving on the frontline of emerging infectious diseases. These professionals not only aid in preparing for, but protecting against pandemic and endemic situations in Pakistan and around the world. These tasks cannot be done individually and require a collective thought process - combining the minds, languages, cultures, and differences throughout Pakistan. It has been an honor to humbly serve and belong to an organization that provides the leadership needed to serve so many.

INSTITUTIONAL BIOSAFETY COMMITTEE WORKSHOPS

OCTOBER, 2022



Pakistan Biological Safety Association (PBSA) in collaboration with Xibios Biorisk Consulting Belgium, CHROME Biorisk Consulting US, and Fogarty International Center (FIC) National Institutes of Health (NIH) US conducted a series of "Institutional Biosafety Committee (IBC)" workshops. These workshops were held in Karachi at Mövenpick Hotel on October 19 and 20, in Lahore at Faletti's Hotel on October 22 and 23, and in Islamabad at PBSA Training Center on October 25 and 26, 2022.

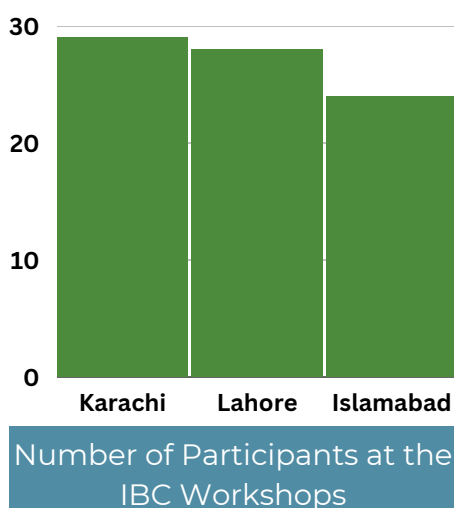
FOCUS AREAS

- the resources needed to create an effective IBC and potential challenges in the way of the IBC's activities
- tools and methods to build an ISO-compliant biological risk management system
- ISO hazard/risk/threat identification and assessment algorithm
- Role of a Biosafety Officer



PROCEEDINGS & CONCLUSION

The workshop brought together Pakistani institutions with experience running successful Institutional Biosafety Committees (IBC) and less experienced institutions with nascent/nonexistent and non-functional IBCs. The purpose of this workshop was to create and strengthen IBCs at less-experienced institutions. Since the workshops, through monthly follow-up calls, PBSA is coordinating with the participating institutions to create tools and materials to ensure that new IBCs are effective and resilient. After the six follow-up calls, there will be three region-specific, one-day closeout meetings to review the materials and tools that were developed and reflect on lessons learned and best practices.



GLIMPSES OF THE IBC WORKSHOPS



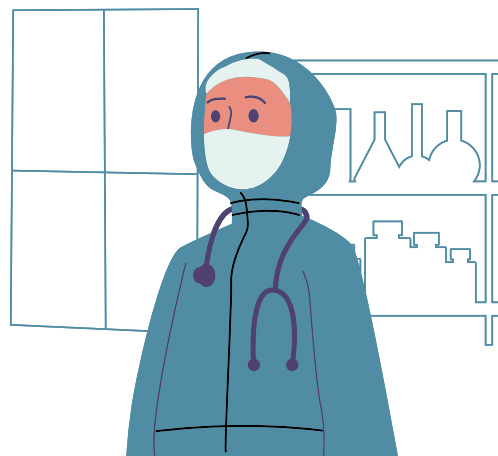
Karachi - Group photo of the participants with the facilitators

“

“PBSA ARRANGED A BRILLIANT WORKSHOP!”

“I WILL BE ABLE TO CONVINCE MY BOSS OF THE IMPORTANCE OF IBC.”

”



Islamabad - Tim Trevan delivering a presentation



Lahore - Tim Trevan and Philippe Stroot in discussion with the participants

IN-PERSON/HYBRID IBC MEETINGS

2023

Since the initial IBC workshops, PBSA has been conducting monthly virtual follow-up calls with the Institutional Biosafety Committee (IBC) participants since January 2023. The project also involves three in-person meetings every two months for the chapters, with the first ones held in February and March 2023. These meetings aim to evaluate the impact of the IBC workshops in each chapter and provide necessary resources and support to participants, whether they have nascent or well-established IBCs. PBSA has scheduled two additional in-person meetings to be conducted separately for each of the three chapters.



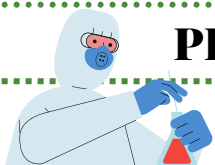
Hybrid meeting of the Punjab/Balochistan chapter held at Four Points by Sheraton Lahore on February 27, 2023, led by convener Mr. Zia Ashraf



In-person meeting of the ICT/KP chapter at Pakistan Academy of Sciences on March 13, 2023, with Dr. Zenab Tariq and Dr. Tahir Usman serving as Chapter Leads



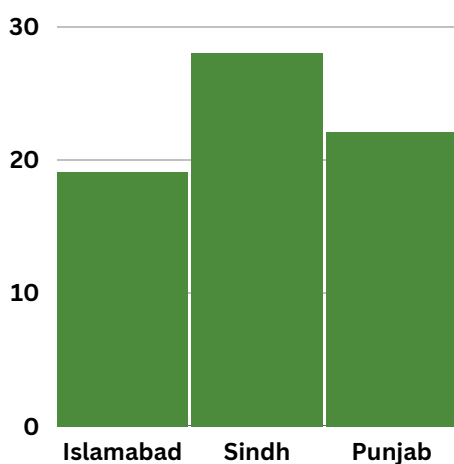
In-person meeting of the Sindh chapter at Mövenpick Hotel, Karachi on March 18, 2023, with Dr. Afsheen Aman and Mr. Furqan Kabir serving as Chapter Leads



PERSONNEL RELIABILITY WORKSHOPS

NOVEMBER, 2022

Fogarty International Center, in collaboration with PBSA and Chrome Bio-risk Management LLC, hosted three workshops on Personnel Reliability. These 2-day training sessions emphasized that personnel reliability is a critical process for laboratories handling high-consequence pathogens to ensure both the security and safety of their staff and colleagues. Exercises drew on participants' real-life experiences and knowledge to demonstrate that personnel reliability creates value by improving the quality of research and scientific reputation.



Number of Participants at the PR Workshops



The workshop provided clear insight about personnel reliability



PROCEEDINGS & CONCLUSION

During the workshop, the participants had a productive discussion about developing a Personnel Reliability Plan (PRP) and their individual plans to implement it in their respective institutes. To ensure effective development of these PRPs, PBSA has initiated monthly follow-up meetings to monitor and evaluate their progress. These meetings began in January 2023 and will continue until July 2023, followed by a final closeout meeting.



Islamabad - Tim Trevan delivering a presentation

RISK ASSESSMENT WORKSHOP

NOVEMBER, 2022

The Pakistan Biological Safety Association (PBSA), in collaboration with the Fogarty International Center (FIC) and Dr. Philippe Stroot from Xibios Biosafety Consulting, organized a Biological Risk Assessment (BRM) Workshop from November 2 to November 4, 2022, in Islamabad. The workshop's primary focus was on the new Biorisk Management approaches proposed by the World Health Organization (WHO) in its fourth Laboratory manual.



Glimpses of the workshop at the PBSA Training Center

FOCUS OF THE WORKSHOP

The workshop's primary focus was on critical elements such as "safety culture," Good Microbiological Practices and Procedures (GMPP) and SOPs, personnel training, prompt reporting of incidents and accidents, appropriate investigations, and corrective actions. Dr. Philippe Stroot from Xibios Consulting led the workshop, aiming to raise awareness and promote safer biomedical research and practices.



PBSA BIOPRISM

A LABORATORY SAFETY TRAINING INITIATIVE

BioPrism is the first biosafety training program in Pakistan that focuses on the behavior and nurturing of all those serving in and supporting biological laboratories. The name was coined by Dr. Saima Saleem, a founding faculty member, who proposed the analogy of a white light dispersing into seven colors through a prism.



The First Bioprism Batch and its Mentors

"With advancements in science and technology, biosafety and biosecurity have become crucial for public and environmental safety. The Pakistan Biological Safety Association (PBSA), in collaboration with Behavioral Based Improvement Solutions (B-BIS) and the Fogarty International Center at the National Institutes of Health (NIH) in the USA, conducted awareness programs to train laboratory personnel. From 2014 to 2016, workshops were held, educating 60 participants from across Pakistan on biosafety principles. Out of these, 20 individuals were selected for the intense "Train the Trainer Workshop." Subsequently, seven participants underwent comprehensive training in "Wet Workshops." Sean Kaufmann, the trainer, and mentor, provided biosafety knowledge to the first batch, which later became the founding faculty of BioPrism, including Akbar Ali, Amber Javid, Ali Ahmad Sheikh, Furqan Kabir, Javed Muhammad, Saima Saleem, and Samreen Sarwar.

BioPrism has trained five additional batches, aiming to spread biosafety awareness nationwide. Their slogan, "Let's do safety together," encourages trainees to mentor at least seven more personnel in biosafety practices."



Dr. Saima Saleem, Ph.D. Post Doctorate (OU-HCOM)
Associate Professor
Dr. A. Q. Khan Institute of Biotechnology and Genetic
Engineering (KIBGE), University of Karachi
PBSA Master Trainer

TRAIN THE TRAINER WORKSHOPS

2022



The Pakistan Biological Safety Association in collaboration with Fogarty International Centre organized three regional Train the Trainer (TOT) Workshops in 2022.

The workshops provided advanced biological risk mitigation training to science professionals from various institutions in KPK, Punjab, and GB. The ongoing TOT workshop equips participants with knowledge and practical skills to enhance laboratory safety and reduce the risk of exposure to biological hazards. The training covers topics such as donning and doffing PPE, working in a biosafety cabinet, and promoting safer working environments.

Region	Venue	Dates	No. of Participants
Punjab	University of Bhawalpur	August 22-24	49
Khyber Pakhtunkhwa	COMSATS University Abbottabad	August 29-31	46
Gilgit Baltistan	Karakoram International University	October 28-30	74

GLIMPSES OF THE TOT WORKSHOPS

2022



Facilitators at the Punjab TOT involving participants in engaging demonstrations.



Facilitators of the KP TOT actively engaged in demonstrations at their stations.



Captivating glimpses from the GB TOT: Engaging lecture (left) and station (right).

TRAIN THE TRAINER WORKSHOPS

2023



"I LEARNED A LOT OF NEW THINGS IN THIS WORKSHOP AND LOVED THE WAY ALL THE STATION LECTURES WERE DELIVERED. THE OUTSTANDING MANAGEMENT MADE THE EXPERIENCE EVEN BETTER.

THANK YOU, PBSA!"

-TOT Participant



PBSA conducted two more Regional TOTs in 2023 in Balochistan and Islamabad Capital Territory.

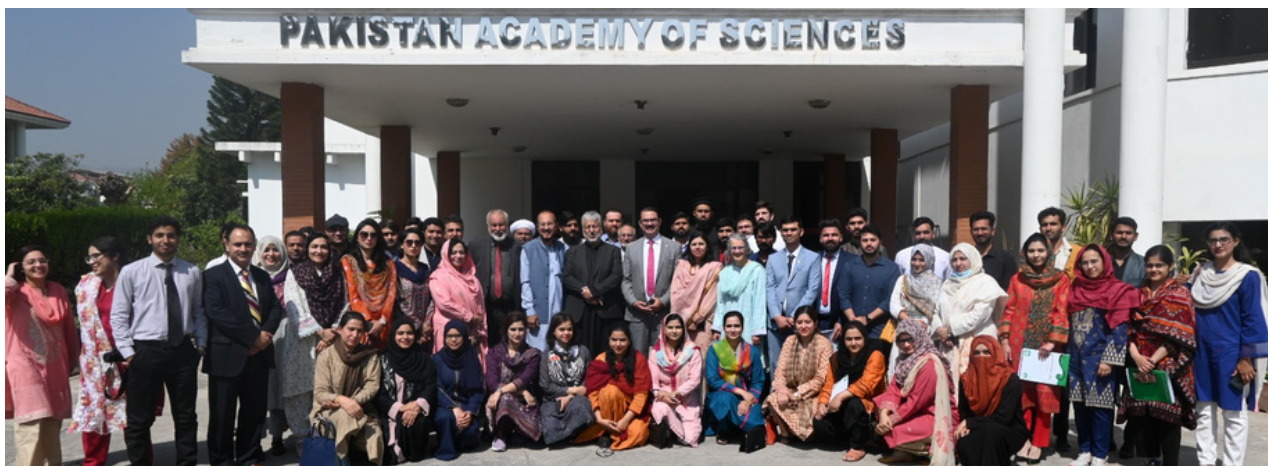
For the Train the Trainer (TOT) workshops, PBSA utilizes highly qualified trainers from the regional chapter, including the chapter representatives and other master trainers who have graduated from PBSA's Master Trainer and Laboratory-Based "Wet" Workshop. These regional master trainers possess extensive knowledge and expertise in biosafety and biosecurity and are equipped to effectively impart this knowledge to participants during the TOT workshops.

PBSA is profoundly grateful to all the participants, trainers, Executive Council, and patrons for their unwavering support of this cause. The workshop achieved its primary objective of promoting safe behaviors and practices in laboratories to minimize risks and enhance laboratory safety.

Region	Venue	Dates	Participants
Balochistan	Sadaf Resort, Gwadar	March 5-7	46
Islamabad Capital Territory	Pakistan Academy Of Sciences	March 11-13	44
Sindh	Liaquat University of Medical Sciences, Jamshoro	May 11-13	45

GLIMPSES OF THE TOT WORKSHOPS

2023



A Facilitator Station at ICT TOT



Drs Mukhtar Ahmed & Zabta Shinwari



Facilitators of the Gwadar TOT delivering lectures at their respective stations.



Facilitators of the Sindh TOT delivering lectures at their respective stations.



BIOSAFETY AND BIOSECURITY MANAGERS

LEADERSHIP TIPS

"Based on best practices and recommendations from experts in the field, here are some leadership tips for biosafety and biosecurity managers:

LEAD BY EXAMPLE

As a leader in the field, it's important to model the behaviors you expect from your team. This includes adhering to safety protocols and procedures, being transparent and communicative with your team, and continually seeking out opportunities for improvement.

BUILD STRONG RELATIONSHIPS

Collaboration and communication are key to effective biosafety and biosecurity management. Build strong relationships with stakeholders across your organization and beyond, including researchers, clinicians, regulatory bodies, and emergency response teams.

STAY UP-TO-DATE ON THE LATEST RESEARCH & TECHNOLOGIES

The field of biosafety and biosecurity is constantly evolving, and it's important to stay current on the latest research, technologies, and best practices. Encourage your team to pursue professional development opportunities, and prioritize ongoing training and education.



PLAN FOR EMERGENCIES

Despite best efforts, emergencies can still occur. Make sure your team is prepared to respond to emergencies, with clear protocols in place and regular drills and exercises to test and refine your response plans.

Effective biosafety and biosecurity management require strong leadership, collaboration, and a commitment to safety and continuous improvement."

Prof Dr. Zabta Khan Shinwari
Distinguish National Professor/Professor Emeritus
Quaid-i-Azam University, Islamabad-Pakistan
Patron
Pakistan Biological Safety Association



PBSA CHAPTER ACTIVITIES

2022-2023

PBSA remains committed to spreading its message across all regions of Pakistan, which is why we have established seven chapters across the country. We believe that representation matters, and that's why we ensure that all chapter heads and co-chapter heads are given equal opportunities to carry out our mission. Our dedicated representatives are tirelessly working to address the pressing issues of biosafety and biosecurity in Pakistan. Over the years, they have engaged with a diverse range of people in their regions, which has helped us in spreading awareness about our cause. PBSA is incredibly thankful for their services and dedication.

	Chapter	No of Activities	Estimated Beneficiaries
	Islamabad Capital Territory	8	420
	Khyber Pakhtunkhwa	8	800
	Balochistan	3	650
	Punjab	9	720
	Sindh	7	490
	Azad Jammu & Kashmir/ Gilgit Baltistan	9	415

PBSA CHAPTER REPRESENTATIVES

2022-2023

ISLAMABAD CAPITAL TERRITORY



**DR. AFREENISH
HASSAN**
CHAPTER HEAD 2023



DR. ARSHIA AMIN BUTT
CO-CHAPTER HEAD 2023



DR. MUHAMMAD ALI
CO-CHAPTER HEAD 2023

KHYBER PAKHTUNKHWA



DR. AMJAD HASSAN
CHAPTER HEAD 2023



DR. TARIQ KHAN
CO-CHAPTER HEAD 2023



DR. SIDRA PERVEZ
CO-CHAPTER HEAD 2023

BALUCHISTAN



PROF. HALEEMA SADIA
CHAPTER HEAD 2023



MR. KAMRAN HUSSAIN
CO-CHAPTER HEAD 2023



MS. SADGANJ NIZZAR
CO-CHAPTER HEAD, 2023

PUNJAB



**MR. MUHAMMAD ALI
MALIK**
CO-CHAPTER HEAD 2022
CHAPTER HEAD 2023



DR. SADIA ASLAM
CO-CHAPTER HEAD 2023



**MR. RAZA MOHY-UD-
DIN**
CO-CHAPTER HEAD 2023

PBSA CHAPTER REPRESENTATIVES

2022-2023

SINDH



DR. SITWAT ZEHRA
CHAPTER HEAD 2023



DR. MUHAMMAD ZOHAB
CO-CHAPTER HEAD 2023
CHAPTER HEAD 2022



DR. ALI RAZA
CO-CHAPTER HEAD 2023

GILGIT BALTISTAN



DR. QAMAR ABBAS
CHAPTER HEAD 2023



DR. FAIZ ULLAH KHAN
CO-CHAPTER HEAD 2023



MR. MUHAMMAD HASSAN
CO-CHAPTER HEAD 2023

AZAD JAMMU & KASHMIR



PROF. SYED MANZOOR IQBAL
CHAPTER HEAD 2023



DR. SHABANA BASHIR
CO-CHAPTER HEAD 2023

PBSA expresses its heartfelt gratitude to its dedicated chapter representatives. Their unwavering commitment and tireless efforts have played a crucial role in engaging a wide audience and raising awareness about biosafety and biosecurity. Through their active involvement and effective communication, they have effectively utilized PBSA's platform to promote these important aspects. Their dedication and passion have been instrumental in advancing the mission of PBSA and fostering a culture of biosafety and biosecurity awareness. PBSA recognizes and appreciates their invaluable contributions in making a positive impact in the field of biosafety and biosecurity.

PBSA CHAPTER ACTIVITIES

2022-2023

PUNJAB



The Punjab Chapter of PBSA organized the following events in 2022 and 2023:

- Workshop on "Fundamental Concepts of Infection, Prevention and Control" held at Nishtar Medical University Multan on March 16, 2022.
- Workshop on "Responsibilities of Allied Health Professionals for Biosafety and Biosecurity" conducted at the University of Haripur on March 24, 2022.
- One-day BRM event at GC Women's University, Faisalabad on March 30, 2022.
- Training session on "Donning, Doffing, Proper Use of Biosafety Cabinet and Spill Management" at Sheikh Zayed Medical College (SZMC) on April 11, 2022
- Workshop on "Biorisk Management (BRM)" at SZMC on May 30, 2022
- Three-day TOT workshop on Biological Risk Mitigation at Bahawalpur from August 22-24, 2022 with support from PBSA central
- A workshop and PBSA stall at the 19th Health Asia Expo at Expo Center, Karachi on October 14, 2022
- One-day hands-on training workshop on Biosafety in Clinical lab at the Punjab Health Department, Lahore on March 21, 2023
- Lab Professionals' Week on Biosafety at SZMC on April 27, 2023



Acknowledgment of contribution: PBSA thanks former Chapter Head Punjab Dr. Rubeena Hafeez (2022), former Co-Chapter Head and current Chapter Head Mr. Mohammad Ali Malik, and current Co-Chapter Heads Raza Mohy Ud Din and Dr. Sadia Aslam for their valuable contributions.

PBSA CHAPTER ACTIVITIES

2022-2023

ICT



The ICT Chapter of PBSA organized the following events in 2022 and 2023:

- Awareness session on "Use of Personal Protective Equipment in Laboratories" at College of Medical Laboratory Technologist Islamabad on June 21, 2022
- One-day seminar on "Biosafety and Antimicrobial Resistance" at Fauji Foundation Hospital Rawalpindi on Oct 19, 2022, with 70 participants
- Two one-day workshops on "Biosecurity and Biosafety" at the Capital University of Science and Technology Islamabad in Aug 2022
- One-day seminar on "Biosafety and Biosecurity" at Abasyn University Islamabad on Sep 27, 2022, with 50 participants
- Awareness session on "Biosafety and Biosecurity" at COMSATS University Islamabad on Dec 7, 2022, with over 50 participants
- A one-day workshop on "Role of Biosafety and Biosecurity in Life Sciences Research" at the Department of Zoology Rawalpindi Women's University on March 9, 2023
- Three-day TOT workshop on Biological Risk Mitigation at Pakistan Academy of Sciences Islamabad from March 11-13, 2023 with support from PBSA central

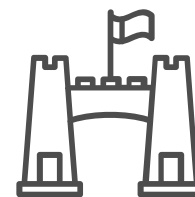


Acknowledgment of contribution: PBSA expresses gratitude to Chapter Head ICT Dr. Afreenish Hassan and Co-Chapter Heads Dr. Arshia Amin Butt and Dr. Muhammad Ali for their invaluable contributions.

PBSA CHAPTER ACTIVITIES

2022-2023

KP



The KP Chapter of PBSA organized the following events in 2022 and 2023:

- Hands-on Training Workshop on Biosafety and Biosecurity in Life Science Research at Shaheed Benazir Bhutto Women's University on June 7, 2022
- ToT Workshop at COMSATS University Islamabad, Abbottabad Campus from August 29-31, 2022 with support from PBSA central
- Seminar on International Frameworks for Global Health Security at Bacha Khan University Charsadda on November 7, 2022, with 200 participants
- Seminar on Infection Prevention & Control for AMR at Khyber Medical University (KMU) Peshawar on November 24, 2022, with 200 participants
- Training Workshop on Key Concepts of Biosafety and Biosecurity at the University of Haripur on December 8, 2022, with 30 trainees
- One-day Workshop on Infection Prevention & Control at KMU on Feb 16, 2023
- Three days of hands-on training in Safe Handling of High-Consequence Pathogens organized by Dr. Hafsah Muhammad at KMU on March 16-18, 2023
- One-day Workshop on Biosafety Concepts at Abdul Wali Khan University Mardan arranged by Dr. Tahir Usman on March 20, 2023



Acknowledgment of contribution: PBSA extends sincere appreciation to Chapter Head of KP, Dr. Amjad Hussain, and Co-Chapter Heads, Dr. Tariq Khan and Dr. Sidra Pervaiz, for their unwavering dedication to the organization.

PBSA CHAPTER ACTIVITIES

2022-2023

Balochistan



PBSA Balochistan Chapter organized the following events in 2022 and 2023:

- The University of Balochistan (UoB) hosted a two-day workshop on May 17-18, 2022, focusing on "Roadmap and Implementation of Biosafety and Infection Control Practices in Balochistan." The workshop was graced by the presence of the Vice Chancellor of UoB as the chief guest. The event was attended by around 80-90 students, along with faculty members and lecturers from the university, as well as 10-20 laboratory officials.
- A two-day workshop on "Biosafety & Biosecurity Practices: Emphasis on Personal Safety of a Lab Biologist." was held on March 2-3, 2023, at the University of Turbat. The chief organizer of the event was Dr. Niamatullah Kakar, who ensured that the workshop ran smoothly.
- A Three-day TOT workshop on Biological Risk Mitigation in Gwadar on May 5-7 2023. The event trained 46 professionals from different institutions in Balochistan, including areas like Gwadar, Turbat, Panjgur, Quetta, Pasni, and Hub. The opening ceremony of the workshop on March 5, 2023, was graced by Dr. Dolat Khan, Registrar University of Gwadar, as the chief guest.



Acknowledgment of contribution: PBSA expresses sincere gratitude to the Chapter Head of Balochistan, Dr. Haleema Sadia, Co-Chapter Heads Mr. Kamran Hussain and Ms. Sadganj Nizar Mohammad, and former Chapter Head Dr. Fazal Ur Rehman for their invaluable service and leadership to the organization.

PBSA CHAPTER ACTIVITIES

2022-2023

Sindh



The Sindh Chapter of PBSA organized the following events in 2022 and 2023:

- A two-day workshop on Strategies to Embrace Biosafety Global Challenges by Young Scientists on March 3-4, 2022 at the University of Karachi
- Seminar on Fundamental Concepts on Infection Prevention and Control on March 7, 2022, at the Jinnah Postgraduate Medical Center, Karachi
- Another seminar on Fundamental Concepts on Infection Prevention and Control at Ruth Pfau Civil Hospital Karachi
- International Women's Day Celebration in collaboration with OWSD Pakistan Chapter on March 8, 2023, at Dr A. Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi
- A one-day workshop on Personnel Reliability (PR-I) on February 28, 2023, at KIBGE. University of Karachi
- Biosafety awareness workshop on February 25, 2023, at the Alkhidmat Hospital Karachi Head Office
- Three-day TOT workshop on Biological Risk Mitigation at the Liaquat University of Medical & Health Sciences, Jamshoro from May 11-13, 2023



Acknowledgment of contribution: PBSA thanks Sindh Chapter representatives Dr. Muhammad Zohaib, Mr. Ali Raza, & Dr. Amjad Ali Mughal for their service. We also appreciate the leadership of current Chapter Head Dr. Sitwat Zehra.

PBSA CHAPTER ACTIVITIES

2022-2023

Gilgit Baltistan



The GB Chapter organized the following one-day events in 2022 and 2023:

- Training on Handwashing and Gloves Removal at IPM Lab, Agriculture Department, Skardu on April 22, 2022
- Orientation on Biosafety and Biosecurity at Training Hall, Agriculture Department, Skardu on May 18, 2022
- Training on Laboratory Safety at Soil Testing Lab, Agriculture Department, Skardu on May 29, 2022
- Session on Handwashing during Food Processing at Community Centre, Shigri Kalan Gamba, Skardu on June 14, 2022, and at Sundus Farmer Field, Skardu on April 10, 2023
- Seminar on Health and Hygiene at Shagharthang Kachura, Skardu on June 20, 2022, at Farmer Field, Nazimabad, Kowardu on March 13, 2023, and at Toosi Public School, Kowardu on March 25, 2023
- ToT Workshop at Karakoram International University, Gilgit Baltistan from October 28-30, 2022 with support from PBSA central. The workshop was attended by 74 participants from various regions of GB



Acknowledgment of contribution: PBSA would like to express its appreciation to the representatives of the GB Chapter, including Chapter Head Dr. Qamar Abbas and Co-Chapter Heads Dr. Faizan Ullah Khan and Mr. Muhammad Hassan, for their valuable contributions and commitment to the organization.

RECENT EVENTS

2023

PBSA CELEBRATES ITS FIFTEENTH (15TH) BIRTHDAY

PBSA was founded in 2008 to promote biological safety and security in Pakistan. PBSA celebrated its 15th birthday on March 18, 2023, at Mövenpick Hotel, Karachi. Dr. Saeed Khan spoke about the association's vision and achievements at the event, thanking the Sindh Chapter for their support.

Celebrating its 15th birthday, PBSA has made significant progress and remains dedicated to its mission. This milestone inspires renewed energy and determination for the future.



A few glimpses of the cake-cutting ceremony held in Karachi on March 18, 2023.

PBSA SIGNS IMPORTANT MOUs FOR COLLABORATION

PBSA was established in 2008 to promote biosafety and security in Pakistan. The association has since raised awareness about biosafety and provided support to professionals in the life sciences. At a recent event, Dr. Saeed Khan shared his vision for PBSA's future and thanked the Sindh Chapter for their contributions. The celebration of PBSA's 15th anniversary is a testament to its commitment to promoting biosafety and an opportunity to reflect on past progress and future goals.



PBSA signs MoU with UoT (top) and UG (bottom)

RECENT EVENTS

2023

IFBA EXAM PREPARATORY COURSES

The Pakistan Biological Safety Association offered IFBA Biorisk Management (BRM) and Biosecurity Certification Exam Preparatory courses and exam scholarships in collaboration with Health Security Partners. The courses consist of weekly webinars, reading assignments, and practice tests. 78 Pakistani professionals received BRM certification through this program, while 19 received biosecurity certification. This year, we also anticipate providing more courses and scholarships.



PBSA SUBMITS TWELVE PROPOSALS TO TACKLE BIOSAFETY AND BIOSECURITY CHALLENGES IN PAKISTAN

This year, PBSA has made significant progress in its ongoing efforts to tackle the biosafety and biosecurity challenges facing Pakistan. We have submitted twelve project proposals to our partners, covering a range of critical areas such as Leadership in BRM, BSO officers, Waste Management, Animal Biosecurity, and Transboundary Infections. These proposals have been developed by our core staff, executive council, and esteemed collaborators, including Tim Trevan from Chrome Consulting, Sean Kaufman from Safer Behaviours, and Philippe Stroot from Xibios.

We extend our heartfelt thanks to the Fogarty International Centre, particularly Dr. David Spiro, Dr. Zeba Rasmussen, and Kate Skoczopole, for their invaluable support and guidance throughout this process. We would also like to express our gratitude to the Health Service Partners for their continued partnership and support.

In addition to our core focus on biosafety and biosecurity challenges, PBSA is committed to promoting Diversity, Equity, Inclusion, and Accessibility (DEIA) in all aspects of our work. We are proud to announce that our proposals also prioritize engaging women in BRM, with a specific focus on DEIA criteria. These projects represent a significant step forward in our ongoing efforts to create a safer and more secure future for individuals and communities across Pakistan.



We are deeply grateful to all of our partners for their ongoing support and dedication to this important work. Together, we are committed to securing the necessary funding and resources to support these critical projects and make a real difference in the fight against biosafety and biosecurity risks in Pakistan.

Thank you for your continued support, and we look forward to working together in the years to come.

THANK YOU!

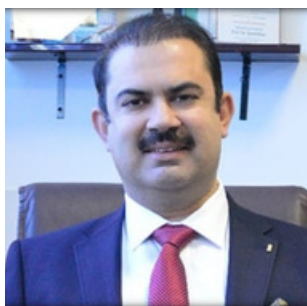
Dear supporters,

As we come to the end of another training year, we want to take a moment to express our deepest gratitude to all of our partners, master trainers, members, chapter representatives, and volunteers who have helped make our work possible. Thanks to your dedication, we have been able to make a real difference in the fight against biosafety and biosecurity risks in Pakistan. Your support has enabled us to create a safer and more secure future for individuals and communities across Pakistan. As we look ahead to the future, we know that our work is far from over. But with your continued support and dedication, we are confident that we can make even greater progress in the years to come.

Once again, thank you for all that you do. We are honored to have you as part of our community, and we look forward to continuing our important work together.

Warmly,
Pakistan Biological Safety Association

OUR TEAM



PROF. DR. SAEED KHAN
PRESIDENT



DR. JAVED MUHAMMAD
GENERAL SECRETARY



DR. ALI AKBAR
TREASURER



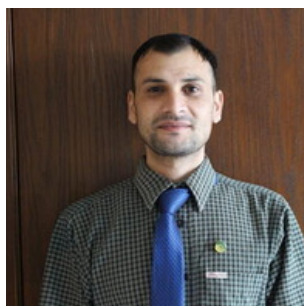
DR. MASHAAL CHAUDHRI
PROGRAM MANAGER



HAJRA WAHEED
PROJECT COORDINATOR



AUN ISHFAQ
FINANCE MANAGER



NAEEM KHAN
ACCOUNTS OFFICER



MUHAMMAD RIAZ
ADMINISTRATOR

 WWW.PBSA.ORG.PK

 PBSA.PAK@GMAIL.COM

 [@OFFICIAL_PBSA](https://twitter.com/OFFICIAL_PBSA)

 +92-51-5912878

 [@PAKISTANBIOLOGICALSAFETYAS9549](https://www.youtube.com/@PAKISTANBIOLOGICALSAFETYAS9549)



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