

## Tremendous Contribution of Dr. Shahid Ullah to Scientific Community during COVID-19 Pandemic in the Form of Scientific Research

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### Abstract

Legends are often the leading indicators of progress, civilization, culture for society and especially for the scientific community. The world is running on such beneficent, diligent, and creative-mind people, which sacrificing their precious time of life for the aid of the society. Dr Shahid Ullah is one of those who tried day night for humanity and have provided a great platform for the scientific community as well as for local researcher in the form of S Khan Lab, which have all updated biological databases of all research area that were not been provided on such friendly finding forum. The purpose of biological databases is to store, organize and distribute data in a standardized and searchable manner to facilitate the processing and visualization of data for humans. Taken together he has collected all biological databases to one easy and friendly finding manner platform which is available at <http://www.habdsk.org/> with timely updates. Further he has also provided two databases on the Covid-19, a global challenge for scientific community recently.

**Keywords:** HABDSK, Database, Dr Shahid Ullah, S Khan Lab, HABDSK.ORG.

### Introduction

Dr. Shahid Ullah aims is to collect all biological databases to one platform and give an easy way to the scientific community for all scientific data, he firmly believed that all scientists would have access to relevant scientific knowledge to assist in their work and analysis. To this end, he freely provides access on easy and

friendly finding way to scientific databases and tools (i.e. resources) in various life sciences research areas including proteomics, systems biology, genomics, biochemistry, molecular biology, transcriptomics, and population genetics. According to the previously published work, there is a huge amount of research

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has been done in the form of databases such as DNA Databases (DDBJ[1], GENCODE[2], CirGRDB[3]) RNA Databases (miRDB[4], ExoRBase[5], miRCarta[6]) Protein Databases (SCOP db[7], CATH db[8], db PTM[9]) Expression Databases (BioExpress[10], Expression Atlas[11], Bgeedb[12]) Pathway Databases (pathDIP[13], MetaCyc[14], KEGG pathway db[15]) Disease Databases (CancerGeneNet[16], CancerTracerdb[17], DriverDBv3[18]). We need to establish the benefits that the(HABD) is for our users, this will enable us to continue that provide HABD as a resource, freely available to the scientific community, and hope to develop HABD to best meet of researcher requirements. For that, Dr. Shahid Ullah has opened their lab and has several researchers(<http://www.habdsk.org/students.php>) to give some useful research work to the scientific community for the benefit of our society, so that, in this pandemic, he focused on his researchers to have some extra more ordinary work and collect scientific data from previously published work by using special keywords that is related to the relevant projects. He has provided a research platform in the form of a biological database (<http://www.habdsk.org/index.php>) of the different research area, The major objectives of biological databases are not only to store, organize and share data in a structured and searchable manner to facilitate data retrieval and visualization for humans[19], but also to provide web application programming interfaces (APIs) for computers to exchange and integrate data from various database resources in an automated manner[20]. Therefore, developing databases to deal with gigantic volumes of biological data is a fundamentally essential task in

bioinformatics[21]. To be short, biological databases integrate enormous amounts of omics data, serving as crucially important resources and becoming increasingly indispensable for scientists from wet-lab biologists to in silico bioinformaticians[22]. According to 'Fernandez-Suarez XM at all' Molecular Biology Database Collection in the journal Nucleic Acids Research, there are sums of 1637 databases that are publicly accessible online[23]. It should be noted, however, that such count of publicly accessible databases is conservative. Some databases are providing online services without publication in the peer-reviewed journal. He gives right to all researchers (<http://www.habdsk.org/contact.php>) and said "We would love to hear your feedback, suggestions, or reports on errors or inconsistencies. The quickest way of reaching us is by contacting us directly on Email, Facebook, or can also use our lab's feedback form and we will direct your message to the appropriate expert. However, keep in mind we get a large volume of feedback, and although we read every message, we cannot guarantee a turnaround time" but will try to respond as soon as we can.

### Goal and Task

According to previous evidence, everyone has their task and dreams for their life and future, such as Albert Einstein's Dreams, which have a book written by Alan Lightman in 1992, consists of 30 chapters, and has been translated into thirty languages. The novel fictionalizes Albert Einstein as a young scientist who is troubled by dreams as he works on his theory of relativity in 1905. The other common example is USC Judith D. Tamkin, The USC Judith D. Tamkin International

Symposium on Elder Abuse's goal is to build secure and stable environments for all elderly people, around the world, by bringing together thinkers, advocates, caregivers, scholars, policymakers and other stakeholders to share insights, strategize approaches, and help shape and accelerate the field of elder abuse and justice. (<https://victimresearch.org/event/2020-usc-judith-d-tamkin-international-symposium-on-elder-abuse/>). Dr. Shahid Ullah has a vision of making a great contribution to the scientific community, and work on a challenging social welfare research projects, which his work shown in the COVID-19 lockdown, he set up his own Lab (S Khan Lab) and tried, day-night, to offer some value to both research scientists and local people in the form of a newspaper about COVID-19 safety hazard, as well as providing an informative emergency database to the scientific community for fast and easy browsing of all COVID-19 information and freely available at

[http://www.habdisk.org/corona\\_virus.php](http://www.habdisk.org/corona_virus.php) that have been published in Journal of Chemical and medical research [24]. Further, he has provided a comprehensive collection of Covid-19 databases named "CO-19 PDB Covid-19 Pandemic database" that is the core collection of all covid-19 databases and have divided into 6 major categories on the bases of their function and can be access by the clicking at <http://www.habdisk.org/co-19pdb.php>

which will submit to well-known journal. Furthermore, he has built a compressive database in a different research area that hasn't been published in such easy way, especially, DBHR has developed a compressive database on human studies, and soon will be submit to a well-known journal named nucleic acid research (NAR) and freely available by clicking <http://www.habdisk.org/database.php>, in plant research area have provided a friendly database DBPR which is available at <http://www.habdisk.org/dbpr.php>, LDBPR is all about proteins, which is available on <http://www.habdisk.org/ldbpr.php>, DB-FBPA is a collection of Fungus, Bacteria, Protozoa & Algae that can be browse by <http://www.habdisk.org/dbbfy.php>, to avoid missing databases, have another set of collection on the name of CBDB that have almost all biological databases under special categories, it can be access on <http://www.habdisk.org/cbdb.php>. Previously he has published several international articles and databases in his Ph.D. and postdoctoral duration in high cited international journals eg ( NAR[24], Scientific Report [25,26], Briefing in Bioinformatics[27], Oxford Database[28], Chemical Engineering Journal[29], Advanced Functional Materials[30], Applied Surface Science[31], Microbial Pathogenesis[32], Journal of Materials Research[33], Journal of Power Sources[34], Energy Storage Materials [35]) and about databases such as DBPAF dbPAF database for animals and fungi, dbPSP [26], a curated database for protein phosphorylation sites in prokaryotes[28], CGDB: a database of circadian genes in eukaryotes[24] and so on.

## Conclusion

Dr. Shahid Ullah has a dream of making a significant contribution to the scientific community in the field of biological research and knowledge that he is working and trying on, he has provided a great platform to all scientific community during Covid-19 pandemic in the form of HABDSK.org, which is LDBPR is for protein scientists, DBHR is for human-related research scientists, DBPR is for plant research scientists, DB-FBPA is for Fungus, Bacteria, Protozoa and Algae related researchers and to avoid missing data he has constructed a comprehensive database on the name of CBDB that has all research area databases on easy and friendly searching manner, especially in COVID pandemic he has provided two databases, 1st, EDBCO-19 is an emergency database of Covid-19, a global challenge for scientific community recently, 2nd CO-19 PDB is Covid-19 Pandemic database that is the core collection of all COVID-19 databases which is further divided into major six categories on the bases of their function, shortly he has provided the databases of databases on very easy and friendly searching manner for all scientific community with timely updates.

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## Authors contribution

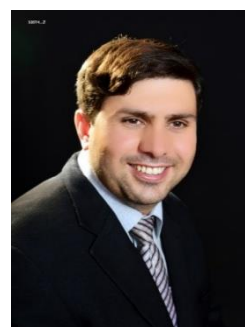
Dr. Sher Ali Khan designed and supervised the project. Prof. Dr. Muhammad Jawed and Dr. Muhammad Junaid has collected the data, Prof. Dr. Kamran Ahmed Soomro and Prof. Dr. Vivake Anand checked and verified the data. All authors reviewed the manuscript carefully and agreed to submit.

## Author information

Dr. Sher Ali Khan belongs to Peshawar, Khyber Pakhtunkhwa province of Pakistan. He did his Ph.D. in Food Nutrition and Safety from the College of Food Science and Technology, Huazhong Agricultural University, Wuhan, People Republic of China (2012-2015), and later had 2 years postdoctoral research experience at Sericultural & Agri-Food Research Institute, Guangdong Academy of Agricultural Sciences Guangzhou PR China. Currently, Dr. Khan is working as a Senior Research Officer at Food Science & Technology Section, ARI, Tarnab, Peshawar, Pakistan.

## Educational info of Dr. Shahid Ullah

Dr. Shahid Ullah received his Ph.D. in Biochemistry and Molecular Biology from Huazhong University of Science and Technology (HUST), Wuhan China in July 2016.



He has three years' experience as a postdoctoral in the Institute of Low-dimensional Materials Genome Initiative,

College of Chemistry and Environmental Engineering, Shenzhen University, Shenzhen, Guangdong, 518060, P. R. China, and Chinese Academy of Science. Further, He is a member of the editorial board of several international journals. Currently, he operates his lab (<http://www.habdsk.org/index.php>) and works on a broad range of research projects in collaboration with many Chinese universities. His research is focused on the Computational study of phosphorylation, drug discovery and development, Rational drug designing

(Computer-aided drug design, structure-based drug design), and “Development of functional nanomaterials including carbon nanomaterials, upconversion nanoparticles, organic nanomaterials, protein-based carriers, and other multifunctional composite nanostructures, for the exploration of novel disease diagnostic and cancer therapeutic approaches” for more information or any query kindly visit his lab site <http://www.habdsk.org/contact.php>.

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