

Together we stand!

Coordinating international efforts seeking drugs to fight COVID-19

Behind COVID-19 the culprit is SARS-CoV-2 a human coronavirus closely related to the strain causing the 2003 SARS outbreak. However, unlike SARS, COVID-19 has not remained regionally confined. Instead, it exploded into a fatal pandemic infecting millions worldwide. Even as hopes for a vaccine grow, the need for adequate drug therapy remains. In addition to providing therapeutic recourse for those for whom eventual vaccines will be medically unsuitable, there is also much that remains unknown and unpredictable including the possibility of future emergent viruses that escape vaccine-based prophylaxis. Indeed, an armory of drug therapies against infectious diseases is a highly desirable asset to clinicians in the global fight against current and future viral respiratory diseases for populations across all sociodemographic indexes. Typically, new drug development takes more than 10 years from basic-science “benchtop” discovery to approved clinical “bedside” medication. Further, this slow process is unfortunately failure-prone, often due to safety considerations. Institut Pasteur Korea (IPK) is dedicated to developing new technologies and methods to innovate and accelerate drug discovery for therapeutics against infectious pathogens like SARS-CoV-2 in order to fight disease like COVID-19. IPK uses high-throughput automated engineering for *in vitro* cell-based assays combined with sophisticated computer-based image analyses methods together powering the ability to screen hundreds of thousands of candidate molecules to identify promising drugs possessing, for example, antiviral properties. Promising compounds can be developed clinically, requiring coordination of clinical trials at an international level. Coordinating clinical trials internationally is challenging inasmuch as clinical protocols and parameters must correspond in a manner satisfying the requirements of multiple drug and ethics approval authorities in different countries. To these ends IPK is fortunate to be one among the thirty-two member institutes of the *Institut Pasteur International Network* (IPIN). As a global scientific research network the IPIN allows IPK to effectively foster international cross-border collaborations for technology transfer further accelerating drug discovery and therapeutic validation. Like all institutes in the IPIN, IPK is a non-profit entity driven by a shared Pasteurian vision that scientific knowledge is for the common benefit of all humanity, a philosophy we believe as scientists promises powerful panacea to end the current and future pandemic crises like COVID-19.