## Address at the International Scientific Inauguration Meeting for the Hearing Institute

## Professor Stewart Cole President of the Institut Pasteur

Chairman of the Collège de France, Chairman of the Board of Directors, Christian Vigouroux, Chairman and Chief Executive Officer of Inserm, Gilles Bloch, Director of the Hearing Institute, Christine Petit, Mrs. Françoise Bettencourt-Meyers, who is not here today and to whom I wish a speedy recovery, Mr. Jean-Pierre Meyers,

Ladies and gentlemen, dear colleagues,

I am delighted to open this international **scientific** meeting, which marks the inauguration of the Hearing Institute. The *Collège de France* is an outstanding venue for an event that strongly reflects the missions which have contributed to the success of this unique French institution since it was founded in 1530: to encourage bold, pioneering research by safeguarding the freedom of researchers and academics, and by facilitating the exchange of scientific knowledge.

The inaugural meeting brings together the leading international specialists in the field of hearing to address the subject from a range of different angles, from the function and dysfunction of the peripheral and central auditory systems to auditory rehabilitation. I am fully confident that this meeting will give rise to

much lively debate, fruitful discussions and new concepts in the science of hearing.

The scientific quality of this meeting also reflects the **international reputation** of Christine Petit, to whom I would particularly like to extend my thanks. Christine is not only a Professor at the *Collège de France* and Head of the Genetics and Physiology of Hearing Joint Research Unit at the Institut Pasteur and Inserm, but an **internationally acclaimed** figure in the field of neuroscience, particularly in audiology. Her **pioneering** role in the discovery of genes involved in human sensory disabilities, especially in hearing impairments, has culminated in global recognition from the scientific community, and I am certain that her prominence in the field will launch the Hearing Institute, of which she is the founding Director, on a **stellar trajectory**.

I will not speak at length about the process that led to creation of the Hearing Institute. For that we would need another meeting! But I would like to mention that the initiative was only possible thanks to the **vision** and **support** of the *Fondation Pour l'Audition*, which was set up by Françoise Bettencourt-Meyers, Jean-Pierre Meyers and the Fondation Bettencourt-Schueller. I would especially like to thank them for their dedicated commitment from the very conception of the Hearing Institute through to its launch and well beyond.

The Hearing Institute is an Institut Pasteur center and, as such, it will federate the research activity of biomedical scientists from the leading scientific partners in France, notably Inserm and the CNRS, in the form of a joint Institut Pasteur/Inserm research unit. The Hearing Institute is an **interdisciplinary center** for basic and medical research whose aim is to promote an integrated approach to auditory neuroscience and to develop innovative diagnostic methods and to promote preventive and curative treatments for hearing loss.

The strength of the Hearing Institute lies in two aspects that it embodies perfectly, that I will now touch on briefly: first, interdisciplinarity and second, the creation and translation of knowledge. The Hearing Institute is rooted in interdisciplinarity, bringing together scientists, engineers and physicians specializing in areas as diverse as biophysics and computational neuroscience. The Hearing Institute also assures a continuum between basic and medical research, as exemplified by its Center for Research and Innovation in Human Audiology (CERIAH), its collaboration with centers for basic and clinical audiology research (CERCAs), initially with the Paris Public Hospital Network (AP-HP), and soon with other university hospitals in France. The Hearing Institute will also optimize links between research and the biotechnology sector, and help contribute to the emergence of a national industry for the diagnosis and treatment of hearing loss.

The Hearing Institute will soon host 10 research teams, comprising a total of up to 130 scientists, in a dedicated building close to the Institut de la Vision in central Paris. This proximity will facilitate progress in research on multisensory integration and combined hearing and visual impairments.

The Hearing Institute is therefore perfectly in line with the Pasteurian scientific tradition. For, although audiology was introduced to the Institut Pasteur in the early 1990s with the work of Christine Petit, its research in neuroscience dates back much further. Since the 1960s, the Institut Pasteur has been home to many fine neuroscience research teams whose discoveries have attracted

international recognition. I would particularly mention the seminal work of Professor Jean-Pierre Changeux and also the research by Dr. David Digregorio, current Director of our Department of Neuroscience. Being affiliated with the Department of Neuroscience, the Hearing Institute will have access to the full infrastructure and intellectual life of the Institut Pasteur.

I should also add that the Hearing Institute complements and **extends** the scientific legacy of Louis Pasteur, namely to push back the frontiers of knowledge while providing tangible responses to public health challenges. For hearing impairment is indeed a major public health issue that needs to be addressed by more research. According to the **World Health Organization** (WHO), there are nearly 500 million people with hearing loss worldwide. The WHO estimates that by 2050, some 900 million people – one-tenth of the world's population – will be directly affected by hearing loss. So, it is essential to coordinate research and translation of the findings in order to address and mitigate these challenges.

The new institute is also a key component of the Institut Pasteur's new **Strategic Plan for 2019-2023**; one of the three specific aims of the Strategic Plan focuses on brain connectivity and neurodegenerative diseases. There is no need to remind this audience that hearing impairment can lead to the isolation of some individuals from society and thus serve as a risk factor for neurodegeneration and dementia.

Finally, I would like to give thanks to those who have been involved in transforming the Hearing Institute from a **dream to a reality**. In addition to Christine Petit, the *Fondation Pour l'Audition*, whom I have already thanked, I would like to thank the **City of Paris**, which acquired the building that houses the

Hearing Institute and contributed generously to its refurbishment, and also to the **Greater Paris Region**, which provided further support for the project. In closing, I would like to extend my heartfelt thanks to our scientific partners, without whom the project would never have been possible – especially Inserm, but also the CNRS and the AP-HP network.

I wish you all an excellent scientific meeting and will now invite Dr. Gilles Bloch, Chairman and Chief Executive Officer of Inserm, to say a few words.