ÉCOLES NORMALES SUPÉRIEURES ÉCOLE NATIONALE DES PONTS ET CHAUSSÉES

CONCOURS D'ADMISSION SESSION 2019 FILIÈRE BCPST COMPOSITION DE LANGUE VIVANTE ÉTRANGÈRE

Épreuve commune aux ENS de Lyon, Paris, Paris-Saclay et à l'ENPC

Durée : 2 heures

L'utilisation des calculatrices n'est pas autorisée pour cette épreuve.

L'usage de dictionnaire est interdit.

Parmi les sujets proposés, le candidat doit traiter celui correspondant à la langue vivante étrangère qu'il a choisie lors de son inscription.

Toute copie rédigée dans une langue qui ne correspondrait pas au choix apparaissant dans le dossier d'inscription définitif du candidat sera considérée comme nulle.

Sujets proposés :

- Allemand
- Anglais
- Espagnol

ANGLAIS

I. <u>Version</u> (12 points)

A year ago, Dr. Matthew Porteus, a genetics researcher at Stanford, received an out-of-the-blue email from a young Chinese scientist, asking to meet. A few weeks later, the scientist, He Jiankui, arrived in his office and dropped a bombshell. He said he had approval from a Chinese //ethics board to create pregnancies using human embryos that he had genetically edited, a type of experiment that had never been carried out before and is illegal in many countries.

"I spent probably 40 minutes or so telling him in no uncertain terms how wrong that was, how reckless," Dr. Porteus said in a recent interview. Dr. Porteus did not report Dr. He's intentions to anyone, because he thought he'd talked him out of it and it wasn't clear where to report the plans of a scientist in China. Neither did two other American scientists Dr. He confided in.

Now, nearly two months after Dr. He shook the scientific world by announcing he had created the first genetically edited babies — twins, born in November — the world's major science and medical institutions are urgently trying to come up with international safeguards to keep such rogue experiments from happening again. But while scientists around the world agree the nightmare scenario must be stopped, they disagree about how to do it. Even inventors of Crispr, the gene-editing tool Dr. He used, differ on the best approach. Some scientists want a yearslong moratorium on creating pregnancies with gene-edited human embryos. Others say a moratorium would be too restrictive, or unenforceable. Some think scientific journals should agree not to publish embryo-editing research. Others consider that misguided or ineffective.

But most agree major health and science institutions should act quickly. (...) They have jointly proposed a commission with academies in other countries to develop criteria so scientists can't "seek out convenient locales for conducting dangerous and unethical experimentation." The proposal included establishing "an international mechanism that would enable scientists to raise concerns."

The New York Times, 29/01/2019

II. Questions (8 points, 100 mots minimum par question)

- 1. Explain why a moratorium could be "too restrictive, or unenforceable."
- 2. To what extent should scientific journals select the information they publish?