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May 7, 2007

Anthony S. Fauci, M.D.
NIAID Director
Office of the Director
National Institute of Allergy and Infectious Disease
6610 Rockledge Drive
Bethesda, MD 20892

Dear Dr. Fauci:

We commend the bold and insightful direction that you and your colleagues advocated for combating tuberculosis in your recent Philadelphia Inquirer commentary and World TB Day address. These are indeed the initiatives that are needed to combat tuberculosis, and especially to halt the advance of MDR and XDR TB.

We agree that the three most pressing areas for action are the development of new: 1) diagnostics, 2) therapeutics; and 3) vaccines. Yet advancing these missions is best done in an information-rich environment, one where biological and informatic data are both tightly integrated and readily available. Nothing like that exists today, and the absence of such support is a notable impediment to facile accomplishment of our united goals.

In March 2006, we published a Policy Forum piece in *Science* explaining how now—with nothing more than today's technology—TB research could take a quantum leap into the information age. The approach that we advocate is as simple as it is effective:

- Archive and catalog in one place the biological agents causing disease: create a biological repository of isolates—a national baseline—of every TB case in the US and select global samples;
- Associate each isolate in a database with its genomic data and phylogenetic classification;
- Integrate these genetic data for each isolate with its clinical and epidemiological data already being collected in each case's Report of Verified Case of Tuberculosis;
- Make this combined biological and information resource available on-line for real-time, evidence-based decision-making driving research, clinical and public health initiatives, and crisis management.

Because of the tremendous public health investment already established for tuberculosis, this National Tuberculosis Archive would become a flagship enterprise; an integrated research asset and decision-making policy resource—a national model for other infectious and even chronic diseases. The proposed design deeply integrates and serves Medicine, Research, and Public Health, and importantly builds an infrastructure aimed at supporting rapid development of new drugs, diagnostics, and vaccines.

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National Center for Genome Resources

National Tuberculosis Archive
Letter to the Director

We have apprised both Drs. Christine Sizemore and Carole Heilman on the implementation details and feasibility of this plan. With your leadership in vision, we the undersigned can make this a reality. At your convenience, please do let us know how we may best advance this contribution.

Sincerely,

Damian Gessler

Gary Simpson

Tom Kindt

Terry Yates

cc: Dr. Carole Heilman

Dr. Christine Sizemore

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