April 4, 2016

Dear Colleagues:

Precision Medicine Centers of Excellence

Background:

The dual, simultaneous revolutions in data (and its analysis) as well as measurement create enormous opportunities for Medicine, particularly at Johns Hopkins. Over the past 125 years, intuitive, wise and experienced clinicians have developed great skill in identifying subgroups of patients. These subgroups appear to represent meta-stable states generated by specific combinations of reinforcing molecular pathways. Disease subgroups have great power to illuminate the biology driving disease. Identifying informative subgroups, the focus of the broader Hopkins InHealth Initiative, will drive innovative disease prediction, monitoring strategies and targeted therapy. These new tools will assure that Johns Hopkins remains a leader as Medicine changes. The Johns Hopkins experience is that disease subgroups are best discerned in the context of centers of excellence, in which large numbers of patients partner with clinicians and investigators, collecting data about disease phenotype and trajectory over time in the context of clinical care, collecting and storing relevant biological samples, and engaging the expertise and technology of our research enterprise. Johns Hopkins Medicine will therefore support the creation of several new Precision Medicine Centers of excellence beginning in FY'17. This investment will occur in the setting of other investments that we are planning, including infrastructure to support use of clinical data for research as well as establishing sample processing and biorepository functions.

Features of successful Precision Medicine Centers of Excellence (PMCOEs)

We are soliciting applications to support PMCOEs, as described below. The following features will be viewed with enthusiasm in the initial PMCOE review process. Successful programs will satisfy many (but not necessarily all) of the following criteria:

- 1. Ongoing clinical activity in the relevant area
- 2. Addresses important patient need/care gap
- 3. Focuses on the definition of clinically relevant patient subgroups (phenotype, trajectory/prognosis, biomarkers, response to therapy)
- 4. Have identified several short-term and long-term research questions which will benefit from well-defined patient populations, clinical research data and biospecimen analyses
- 5. Have multidisciplinary/multi-department components in the COE
- 6. Can demonstrate synergy with Hopkins InHealth and JHGenomics
- 7. Have a clear opportunity to enhance clinical margins either through increased efficiency, or high probability to attract a larger patient base, particularly from out-of-state
- 8. Includes strategy to successfully compete for research grant and/or philanthropy support
- 9. Commitment of program support from departmental funds

Proposals:

Each department can be primary nominator of up to FIVE PMCOEs (5 is particularly relevant to larger departments) - participation in multiple proposals is encouraged.

Proposals should take the form of 2-page concept papers. Proposals should provide for the reviewer a brief overview of the focus of the Center, as well as the work that is being or will be done in the center, both clinical and research. In addition to briefly addressing the 9 topics noted above, proposals should also be specific about the clinical leadership and research teams, and indicate whether data and biosamples will play an integral role. Finally, it should be evident how additional investment will enhance the work of the Center. Budgets are not required at this stage.

Proposals should be submitted by May 1, 2016. Up to 6 potential PMCOEs will be chosen for full business plans, and possible funding in FY17. Additional Centers will be selected for subsequent years.

We look forward to answering questions that you or your team may have. We believe that development of Centers of Excellence aligns well with all parts of our mission and strategic plan, and will play a key role in our continued leadership in biomedical discovery.

Please respond to Drs. Rosen and Ford.

Regards,

Paul B. Rothman, M.D. Landon S. King, M.D. Antony Rosen, M.B. Ch.B., B.Sc. (Hons) Daniel E. Ford, M.D., M.P.H.