December 7, 2020 – IBBR Fellow Zvi Kelman has been recognized for scientific achievement with the Department of Commerce Gold Medal Award. Dr. Kelman, Director of the Biomolecular Labeling Laboratory at the National Institute of Standards and Technology (NIST) and Adjunct Professor at the Department of Cell Biology and Molecular Genetics, University of Maryland College Park, received this award as a member of a NIST research team on the project “Developing a suite of standards including the first NIST living reference material to strengthen the nation's response to potential biothreats”.

The Gold Medal Award represents the highest award given by the Department of Commerce. The Department of Commerce recognizes outstanding employees annually with Gold and Silver Medals for contributions in leadership, personal and professional excellence, scientific/engineering achievement, organizational development, customer service, administrative/technical support, and heroism.

The research team received the award in recognition of methods and standards development to detect bacterial spores and their destruction. The group developed a yeast cell line with a unique genetic sequence that can be detected by an amplification method known as quantitative Polymerase Chain Reaction (qPCR). Yeast, like some pathogenic bacterial species, develop spores, inactive cells that are resistant to environmental insults. For disease-causing bacteria, development of spores can allow the bacteria to persist in the environment even upon treatment with anti-bacterial compounds. The development of this yeast strain and method allows for enhanced detection and confirmation that spores have been degraded.

Dr. Kelman and members of the research team will be recognized on January 13th 2021 at the 48th Annual NIST Award Ceremony.