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Arthur S Sherman* (asherma@nih.gov), 12A South Drive, Room 4007, Bethesda, MD
20892-5621. *Opportunities in Mathematics at the National Institutes of Health.*

Biology is the least mathematical of the sciences, but advances in reductionist explanations and techniques that permit observation with unprecedented spatial and temporal resolution are opening up new opportunities for mathematicians to make important contributions.

The National Institutes of Health (NIH) presents particular opportunities and challenges for mathematicians because it is both a mission-oriented biomedical research institution and a government lab, rather than a university. The costs and benefits of this arrangement will be discussed, including the experience of having one's work evaluated by non-mathematicians, the freedom from applying for research funding or teaching, and the greater prevalence of post-doctoral fellows than graduate students. Outside grants, teaching opportunities and graduate students are available but do not play the central role that they do in the university setting. Some of the breadth of theoretical work carried out at NIH by mathematicians but also other theoreticians, such as physicists, biophysicists, statisticians and engineers will be described. (Received September 12, 2008)