



Louis J. Maher III, Ph.D.

Professor of Biochemistry and Molecular Biology



Louis J. “Jim” Maher III, Ph.D., is a consultant in the Department of Biochemistry and Molecular Biology at Mayo Clinic and dean of Mayo Graduate School. He holds the academic rank of professor of biochemistry and molecular biology. Dr. Maher received the B.S. and Ph.D. degrees in molecular biology at the University of Wisconsin – Madison. He completed postdoctoral training at the California Institute of Technology.

In his diverse research projects, Dr. Maher is studying the nucleic acids, DNA and RNA, working to understand how the locally stiff DNA molecule is bent and looped by proteins and how this bending is involved in the control of gene expression. His lab is also studying how unnatural DNA and RNA molecules can be selected from random libraries for the ability to tightly bind and inhibit proteins in living cells to help develop new approaches to artificial gene regulation in cancer and inflammatory diseases such as multiple sclerosis. Finally, Maher's lab also studies how errors in metabolism can cause cancer. His research has been funded by the National Institutes of Health (NIH), National Cancer Institute, National Multiple Sclerosis Society and the American Cancer Society, among other organizations. As a journal reviewer and editor, Dr. Maher has worked with scientific publications such as *Antisense & Nucleic Acid Drug Development*, *Biochemistry*, *Blood*, *Journal of Molecular Biology*, *Nucleic Acids Research* and *Science*. He has authored numerous articles, book chapters, abstracts and letters.

As dean of Mayo Graduate School, Dr. Maher is responsible for the development and training of Mayo Graduate School’s predoctoral, master’s, Summer Undergraduate Research Fellow and visiting graduate students. With more than 20 years of experience in graduate education, Dr. Maher serves as a strong advocate for student diversity and the mentorship of young investigators. He has received the Mayo Graduate School Teacher of the Year Award four times.

Dr. Maher has served on numerous committees at Mayo Clinic in the areas of research, education and diversity. He co-led the Department of Biochemistry and Molecular Biology for 12 years. As a member of the Education Committee – Rochester, Dr. Maher collaborates to implement the educational directives of the Rochester Executive Board and to further the mission and goals of Mayo Clinic College of Medicine through support of its schools and entities on the Rochester campus. As head of the Graduate School Education Committee, he works in partnership to facilitate accomplishment of the Ph.D. scientist training mission of Mayo Graduate School. Dr. Maher also leads two large NIH education grants funding the preparation of Mayo Clinic research trainees from backgrounds underrepresented in science.

Dr. Maher has received many other honors and awards during his training and career, including the Abbott Laboratories Young Investigator Award, fellowship awards from the NIH and American Cancer Society, the Dean’s Recognition Award for Graduate Education at Mayo Graduate School and recognition as an ad hoc member for the National Institutes of Health Molecular and Cellular Biophysics Study Section. He holds professional memberships in organizations such as the American Association for the Advancement of Science and the American Chemical Society.