

*Center for RNA Biomedicine SMART lab (top)
and Bru-Seq Lab (bottom)*



The Center for RNA Biomedicine is part of the University of Michigan Biosciences Initiative.

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**TOGETHER, WE SOLVE:
CANCER, ALZHEIMER'S,
VIRAL INFECTIONS
SUCH AS COVID-19,
THROUGH RNA RESEARCH
ACROSS DISCIPLINES**



TOGETHER, WE SOLVE

From our Members

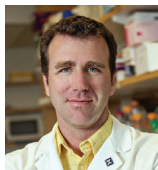
"RNA science is a key to unravelling pathological mechanisms in neurological diseases." —Eva Feldman, M.D., Ph.D., F.A.A.N., Neurology



"RNA is the bridge between genome variation and molecular function that we are quickly crossing due to new technologies." —Ryan Mills, Ph.D., Human Genetics; Computational Medicine and Bioinformatics



"I see patients suffering from neurodegenerative diseases for which there is no cure. This is very difficult to know that there is no definitive treatment. We must keep advancing basic knowledge to end suffering." —Peter Todd, M.D., Ph.D., Neurology



"No matter what disease we are studying, at the end of the day, it comes back to the RNA message." —Ashley Kalinski, Ph.D., Cell and Developmental Biology



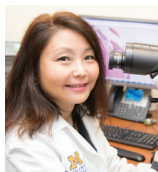
"I see a very data-driven future for RNA Science —our sequencing capabilities are evolving rapidly and I am confident that there is much more to discover in all the data we are generating." —Marissa Cloutier, Ph.D. candidate, Human Genetics



"The future of RNA science lies in understanding how RNA regulates DNA." —Sundeep Kalantry, Ph.D., Human Genetics



"I can see RNA being at the center of biomedical research and one of the most critical components to understand and treat human diseases." —Jiaqi Shi, M.D., Ph.D., Pathology



Support the RNA Revolution

The University of Michigan (U-M) Center for RNA Biomedicine has an outstanding track record both in funding and in attracting, training and retaining leaders in RNA research.

In 2016, the U-M Center for RNA Biomedicine received initial seed funding from the U-M Taubman Institute under Dr. Eva Feldman's leadership. Four years later, the Center was awarded a Tier 1 Grant from U-M President M. Schlissel under the Biosciences Initiative for \$10M over five years.

With a donation to the Center for RNA Biomedicine, you can support and advance the RNA research and its scientific community. The center is actively seeking support for fellowships, events, and facility equipment.

Why U-M?

U-M's entire research expenditures are \$1.62 billion, and about half of these are in the biosciences, with activity in medicine, pharmacy, dentistry, public health, nursing, engineering, kinesiology, biology, psychology, computer science, chemistry and physics.

The U-M is ranked the largest public research university in the US.

For decades, the U-M has successfully encouraged and fostered cross-disciplinary collaborations, an approach to doing research that is required to innovate in biomedicine.

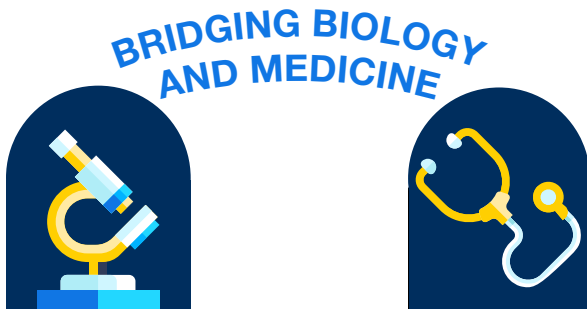
Together, with your support for RNA research, we can revolutionize medicine and help cure millions of people.

For more information, please visit:
rna.umich.edu/make-a-donation

CANCER, ALZHEIMER'S, COVID, ALS, HIV

Recent scientific discoveries on RNA —the molecule of the cell that links all life processes— are leading a medical revolution.

Cancer, Alzheimer's, and viral infections devastate millions of people and their families since for many of these diseases there is no definitive cure or even adequate treatment.



Less than two decades ago, the Human Genome Project revealed that only less than 2% of the genome codes for proteins. We are now discovering that non-coding RNAs play central roles in many aspects of cellular physiology and human diseases. Studying these functions has the potential to revolutionize medicine and will possibly eradicate all human diseases.

Understanding RNA is highly challenging and requires studies from single bacterial cells at nanometer scales to complex interactions between the 60 trillion cells of the human body. RNA research needs scientists from biology to engineering, computational science to medicine to come together and create synergies to lay the foundations for the therapies of the future.

The University of Michigan Center for RNA Biomedicine

The Center facilitates, promotes and supports RNA research and its community of scientists. It does this through annual symposia that gather world-renown experts, a series of seminars hosting speakers from different backgrounds and interests spanning the entire field of RNA research, and various community engagement activities.

With over 160 faculty and their affiliated labs across seven Schools and Colleges of the University of Michigan (U-M), the Center for RNA Biomedicine is one of the leading RNA research communities in the world.

The U-M Center's scientific community has identified five areas of expansion for the period 2019–2024, and has been charged with hiring five faculties in the following specialties:

- RNA drug targeting or as medicine
- Structural biology of RNA nanomachines
- RNA structural in vivo profiling
- RNA protein interaction profiling
- In vivo analysis of long non-coding RNA function

The Center offers access to two U-M core facilities. The Single Molecule Analysis in Real-Time (SMART) Center provides university researchers with single molecule detection and manipulation tools to track and analyze biomolecules with unprecedented detail. At the Bru-Seq Lab, scientists can use four different techniques to reliably collect and analyze RNA sequences.

RNA.UMICH.EDU