

A fondness for RNA is in this center's DNA

Emily Caldwell | Research Communications

The membership of Ohio State's Center for RNA Biology is a moving target because it's constantly increasing. But based on the most recent pizza order — six Buckeyes from Adriatico's — required to feed the monthly meeting crowd, center director Daniel Schoenberg estimates current membership at between 150 and 180 faculty, students, postdocs and staff.

Fifteen years ago, just a handful of scientists on the faculty specialized in the study of RNA. Today, thanks largely to Schoenberg's efforts, Ohio State boasts the largest concentration of RNA researchers in the world.

Though DNA gets all the glory thanks to TV and movies, this group of researchers would argue that RNA is just as, if not more, critical to the fundamentals of life.

"There's not a single life science for which RNA is not the underpinning core," said Schoenberg, a professor of molecular and cellular biochemistry. "And RNA does all the work. It can be a catalyst. It can substitute for protein and function as an enzyme. It contains and carries information."

"DNA is one shape: The double helix. RNA is any shape it can be. That's what makes it so complex."

Last month, Schoenberg received the center's inaugural Excellence in RNA Biology award — to his complete surprise — in honor of his tireless work to found the center as well as his scientific contributions to

understanding how RNA molecules change in response to estrogen signals.

Faculty, postdocs and students conspired to keep the award a secret. The camaraderie reflects Schoenberg's collaborative approach to assembling a center composed of scientists with like minds.

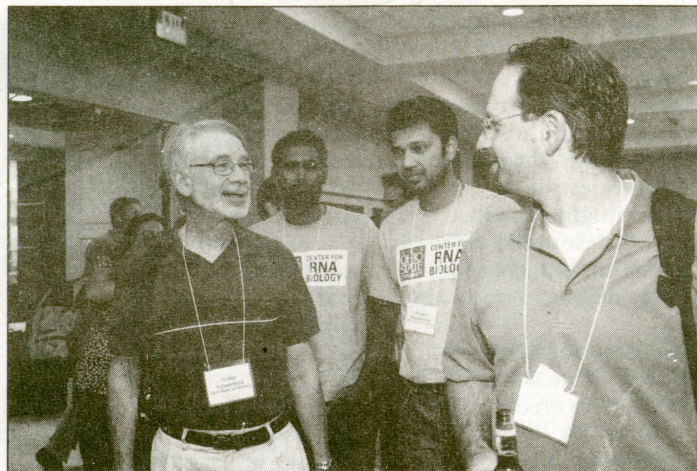
"This center must benefit everybody associated with it," he said. "There are no kingdoms here, no empire building. We want to float everybody's boat."

The award announcement closed the center's first symposium on June 12, which featured oral and poster presentations by Ohio State faculty, postdocs and students as well as talks by some visiting leaders in the field.

Inviting guest speakers to Ohio State was among the first strategies Schoenberg employed to promote the RNA work around campus. On his own, he raised a few thousand dollars a year from partnering biotech companies to fund a fledgling seminar series.

Meanwhile, over the years, departments continued to hire additional faculty with expertise in RNA, and the appointment of two department chairs and an Ohio eminent scholar with expertise in RNA stepped up recruiting even more.

After feeling the specialization had reached critical mass with 25 labs at Ohio State devoted to RNA research, Schoenberg sought support from college and university administrators for development of an official university center. He was encouraged for the fledgling center to apply for a few



A still-surprised Dan Schoenberg talks with members of Ohio State's Center for RNA Biology after the center, which he founded, awarded him its inaugural Excellence in RNA Biology Award in June.

specialized graduate-student training grants that might help the cause. On one of these applications, reviewers for the National Institutes of Health indicated that Ohio State didn't provide enough institutional investment.

In response, Matthew Platz, then Natural and Mathematical Sciences dean, provided support for two "RNA fellowships." With additional support from the colleges of Medicine and Veterinary Medicine, these laid the groundwork for success of the revised application. The RNA fellows continue to serve a key role in the center's activities, Schoenberg noted.

The participation of the RNA research community in Ohio State's Howard Hughes Medical Institute "med into grad" training program was another major

feather in the RNA group's cap. This, and the university's successful application for the elite training grant to fund the Cellular, Molecular and Biochemical Sciences Program (CMBP) sparked the decision to apply for creation of a formal university center.

The process took three years, in part because it coincided with the conversion to semesters. Last October, University Senate approved the center's creation and named Schoenberg its first director. Not long before that, Karin Musier-Forsyth and Michael Ibba, both members of the center's steering committee, had announced the official launch of the NIH-funded CMBP, a specialized training program designed to attract high-quality graduate students and prepare them for life-sci-

ences research careers in academia, government or industry. The program and RNA center co-hosted the inaugural symposium last month.

In presenting the surprise award to Schoenberg, College of Arts and Sciences Executive Dean and Vice Provost Joseph Steinmetz said the center is a significant part of the college's strategic plan.

"A priority we have at this institution is to apply for and successfully win training grants," Steinmetz said. He called the CMBP program "a great endeavor, and I hope it is one of many new training programs at Ohio State."

The existence of the training program, as well as Ohio State's RNA reputation among peer institutions, suggest the Center for RNA Biology has a host of stellar recruitments in its future, Schoenberg said.

"We're at 31 labs now, and the new hires we know about push us up to 35," he said. "A lot of RNA center people are on the CMBP training grant. The idea is to leverage everything we've got. One helps the other. Success breeds success."

That message is not lost on College of Medicine Dean Charles Lockwood, who offered closing remarks at the June symposium.

"In an era when research funding is hard to come by, your work will help regain confidence in the legislature and public that investment in science is crucial," he said.

For more information about the Center for RNA Biology, visit rna.osu.edu/index.html.