When I became Department Head last November my first thought was not “How shall I begin?”. We were well past the semester’s midpoint and quite a number of things were already in full swing. And, I was teaching. So I was in fact thinking “How fast can I go?”, as I prepared to hit the ground running.

When reduced to its fundamental elements, a university is professors working with students. Yet teaching and research are highly complex, interconnected endeavors. Here at MIT Physics, we have a cadre of professionals to support them. In the education office, Cathy Modica leads Nancy Savioli, Katie Lewis, Nancy Boyce and Denise Wahkor to ensure the students are with their professors at the right times and places, along with an enormous amount of student support. Kimeee Heatley creates and maintains web pages to distribute course materials and interfaces with the ever-growing MITx. Tan-Quy Tran orders texts and runs the physics reading room, a popular place of refuge for our students. We value experimental skills and they are taught in Junior Lab by Sean Robinson (SB ’99, PhD ’05) with Andrew Birkel and Charles Bosse. The Technical Services Group, led by Andy Neely with Dan Kelleher, Beth Roberts and Colin Marcus, brings experiments to twenty different lectures meeting weekly. Professor Nergis Mavalvala plays a vital role as our Undergraduate Coordinator and our educational philosophy flows through the Education Committee led by Associate Department Head Krishna Rajagopal.

Start-up funds, foundation support, graduate appointments, and the Headquarters budget are handled by Kari Thande, Rebecca Maitland and Anne Gentilucci. We are a social bunch and Nina Wu handles most of the ten or so major events the Department hosts each year. Vicky Metternich oversees human resources, including faculty searches and promotions. Erin McGrath initiates and sustains the Department’s relationships with our alumni and friends, who support us in so many vital ways.

The next stage of the professor-student relationship is the postdoctoral research fellow and Carol Breen works with a faculty committee to run the Pappalardo Fellowships program that brings several rising stars in physics to MIT each year. Carol also edits and produces physics@mit, which you are now reading. Matt Cubstead runs Headquarters, and reminds me how much money we have. Claudia LaBollita-James tells me where I am supposed to be, what I am supposed to be doing, and when.
What is my role in all this? A big part of the job is to be the chief Departmental spokesperson, explaining what we are doing and how we are doing it, to those both inside and outside the Department. We are in the midst of preparing for our Visiting Committee meeting in October, where the faculty will talk about our future and our challenges. One thing is clear: we will remain the best physics department in the world by continually asking ourselves what we could do even better.

Another role I have is attracting new students and faculty to MIT. Since January 2014 we have welcomed three new faculty to our department: biophysicist Ibrahim Cissé, astrophysicist Mark Vogelsberger and condensed matter physicist Joseph Checkelsky. In Fall 2014, we will be joined by 45 new graduate students, three new Pappalardo Fellows and about 90 sophomores who’ve declared Physics as their major.

A third big job I have is counselor-in-chief: I spend time each day talking to colleagues, students and staff about their careers, aspirations and successes. I have no great wisdom in any of these things, but most of the people who come to see me really just want a sanity check, which I am happy to provide. Much of the time we talk about physics. There are so many good things happening and this edition of physics@mit showcases a few of them: Tracy Slatyer writes about her hunt for dark matter; Janet Conrad is building new small particle accelerators to make intense beams of neutrinos to discern their odd properties; and Sara Seager describes balancing her hunt for distant worlds (exoplanets) with single parenthood. Erin McGrath profiles Jose and Carol Alonso. Jose was an undergraduate at MIT, spent his career at UC-Berkeley and reconnected to MIT through Janet Conrad’s project. This issue also lists faculty awards, such as Alan Guth’s recent Kavli prize.

The Department, MIT and the world are changing fast and I’ve learned the main thing the Department Head has to do is buckle up for an incredible ride.

With best regards,

Peter Fisher
Head, Department of Physics