



DEAR ALUMNI AND FRIENDS OF CALTECH,

This issue of *E&S*, coming just as Caltech's students are returning—or arriving for the very first time—is about education in its many forms. The spotlight is on the day-to-day activity of learning, a process that occurs in Caltech's classrooms, in our laboratories and observatories, in our halls and Houses, outside the Red Door and inside the Athenaeum.

What makes Caltech unique is our focus—on education, on science and engineering, but most of all, on giving everyone at the Institute the means and flexibility to pursue his or her best ideas. We accept the best students, hire the best people and, once they are here, we give them the support and freedom to follow their curiosity.

That said, nothing in here is unusual for Caltech.

It is not unusual to find our researchers looking at the minutest details of learning, from the molecular level up. (See page 14.) It is not unusual—though it may be somewhat surprising—to learn that our scientists are examining not only learning's mechanisms, but what those systems mean in terms of decision making and human behavior.

It is not unusual for an undergraduate like Grayson Chadwick to sit down with a great scientist and mentor such as Dr. Alice Huang (see page 22) and talk about science and the future (though it isn't usually done in front of a photographer).

It is not unusual for scientists with different perspectives to pool their insights, as in the analysis of last March's 9.0 Tohoku-Oki earthquake in Japan. (See page 26.)

And it is not unusual for high-level scientists to be named among the Institute's finest teachers. (See page 32.) The Feynman Prize winners exemplify how learning can be made exhilarating, and how the process of teaching changes with each individual who undertakes the challenge.

Caltech is a place that is structured for learning; it is a place where we teach our students—and one another—how to learn. And in this and every issue of *E&S*, we invite you to learn along with us.

Yours in discovery,

President

e&s

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Editor

Douglas L. Smith

Contributing Editors

Lori Oliwenstein, Kathy Svitil

Contributing Writers

Binti Harvey, Katie Neith, Lori Oliwenstein, Douglas L. Smith, Kathy Svitil, Marcus Y. Woo, David Zobel

Copy Editors

Allie Akmal, Michael Farquhar

Art Director

Jenny K. Somerville

Staff Artist

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Etch Creative

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Binti Harvey—Director of Institute Marketing

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Contact *E&S* at dsmith@caltech.edu

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