My mother is on Facebook.

I admire my mother for lots of reasons, especially her willingness to try new things (like painting, which she adopted with gusto after retiring, see photo). Her bravery in confronting 21st century technology—(she uses dial-up-ackk!) to connect to long-time friends and long-missed family is classic “Mama Mims,” to use the name by which my kids know her. It is comforting and gratifying to me, especially from a distance, to know that she can catch up on the doings of her many cousins and friends across the country, asynchronously, through the magic of status updates, wall posts, and pokes while ensconced in the comfort of a rural Louisiana autumn.

It got me thinking about Aldous Huxley’s *Brave New World*, and other futuristic fiction. It seems to me that most classic science fiction overlooked the impact that the ubiquitous nature of modern communications technology was to have on society. While there are often images of the negative impact of population growth in these stories,¹ I don’t recall any vignettes about the satisfaction of engaging in near-real-time with dozens of your favorite far-flung people. Sure, there is Dick Tracy’s two-way wrist TV, but the emotional, psychological, and sociological impact of knowing more about everyone than you can possibly keep track of wasn’t part of many story lines; of course, there are lots of nefarious government Big-Brother-like characters envisioned, but I don’t recall reading much about the fear that regular people would steal your identity with impunity or threaten your children routinely. Whether this new hyper-connected world is better described as brave or timid is perhaps an open question, but it certainly seems different than any decades-old classic science fiction vision I can recall.

In any case, hyper-communication is here, and physicists are often in the vanguard. While Sigma Pi Sigma is continuing its print communications via this magazine, we are also developing many new ways for our members to communicate. You may know of the remarkable successes of our Adopt-a-Physicist program, wherein high school classrooms adopt physicists virtually for three weeks each semester, each getting to know the other via an online discussion forum. This fall saw the completion of our seventh cycle. Thousands of questions were posed by the students to their adopted physicists—from “What is a neutron star?” to “How important is writing?”—and the physicists responded with detailed, often amusing answers. It is positively inspiring reading, so I encourage you to explore www.adoptaphysicist.org/. In addition, I have listed many other ways the Sigma Pi Sigma network is expanding, all in one place, starting with the rollout of the new Sigma Pi Sigma job site:

**Note:** If you don’t want to type in complicated URLs, just go to: http://bit.ly/edBkG7 and follow the links.

A. Sigma Pi Sigma Jobs—now LIVE: http://jobs.spsnational.org , Registration is free; whether you are job-hunting or hiring, check it out!

B. Networking on The Nucleus: http://bit.ly/hGdLuX , including the Science Outreach Clearinghouse, for those wanting to be listed as providers of science demonstrations and events, and for those looking to book science demonstrations or planetarium visits (for details see page 18). Also on The Nucleus: physics discussions, textbook commentary, undergraduate research clearinghouse, physics contests and videos, and more.


D. Tweeting 140-character-or-less

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¹ I recall, somewhat sheepishly, writing a short story in high school in this vein where all the characters had four official names by necessity due to overpopulation, and in the end it turned out that the protagonist was actually an evolved insect visiting a zoo that featured a rare exhibit of *Homo sapiens*. As you might know, I still have affection for the dramatic.
The Director’s Corner

physic messages on Twitter: http://bit.ly/eLWgAd.
F. Sigma Pi Sigma on LinkedIn: http://linkd.in/f6gsEH, and, of course,
G. Sigma Pi Sigma on Facebook: http://on.fb.me/3w3dWn.
H. “I have a bachelor’s degree in physics” Facebook page: http://on.fb.me/bpT6j0.
I. SPS on Facebook: http://on.fb.me/3w3dWn.

Whether you prefer the sedate comforts of print communications (and there is plenty in this issue to enjoy, from Steve Feller’s colorful article about physicists on bank notes to our new physics puzzle feature to musings on “Thinking Like a Physicist”), or whether you prefer the social networking scene, let us hear from you at sps@aip.org. Or via social networking!

Engage!
Gary White

Shine on Me
Created by Diane Jacobs

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ACROSS
1. Ray of light
2. Fraction of a wave cycle
3. Quantum of light
4. Unit of power
5. Source of illumination
6. Unidirectional semiconductor device
7. Rate of vibration
8. First consumer product with a laser
9. Gas in a laser
10. Discrete amount
11. The act of enlarging
12. Invented carbon dioxide laser
13. Measurable strength of a property
14. Short wavelength
20. Established theoretical basis for laser

DOWN
1. Undulating motion
2. Color of laser beam
3. Reflective surface
4. Branch of physics
5. Theme of puzzle
6. Invented the maser
7. Red crystal
8. Coherent superpositions of optical wavefields
9. Breaking up an electromagnetic wave
10. Supplying energy
11. Single vibration
12. Common gas in a laser
13. Thread
14. Tint

American Institute of Physics
The American Institute of Physics (AIP) is a not-for-profit membership corporation chartered in New York State in 1931 for the purpose of promoting the advancement and diffusion of the knowledge of the science of physics and its applications to human welfare. In order to achieve its purpose, AIP serves physics and related fields of science and technology by serving its Member Societies, individual scientists, educators, students, research and development leaders, and the general public with programs, services, and publications—Information That Matters.

The Institute publishes its own scientific journals as well as those of its Member Societies; provides abstracting and indexing services; provides online database and e-mail services; disseminates reliable information on physics to the public; collects and analyzes statistics on the profession and on physics education; encourages and assists in the documentation and study of the history and philosophy of physics; cooperates with other organizations on educational projects at all levels; and collects and analyzes information on federal programs and budgets.

The Institute represents approximately 190,000 scientists through its Member Societies. In addition, approximately 5,000 students in more than 700 colleges and universities are members of the Institute’s Society of Physics Students, which includes the honor society Sigma Pi Sigma. Industry is represented through 50 Corporate Associates members.

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