Stamp-pot—mashed potatoes mixed with bacon and cabbage—may be the Dutch idea of bliss, but for Christian Bachem, a plant scientist at Wageningen University in the Netherlands, it’s the potato genome that gets the juices running.

Bachem is spearheading the effort to sequence the potato’s 12 chromosomes. A 16-nation consortium, including leading potato producers China, India, Russia, and Poland, has spent the past 6 months trying to come up with money to get started. Now, thanks to $3.6 million from the Dutch government, deciphering of the first chromosome will soon be under way.

Only two other human food staples—rice and tomatoes—have made it into the sequencing pipeline. But potatoes are getting really hot: Consumption in Asia is skyrocketing as rice, wheat, and corn production declines and McDonald’s French fries continue to spread, says Bachem. With the genome sequence in hand, researchers will be able to more easily build in resistance to cold, drought, and disease and possibly come up with a healthy potato chip, he says. Sequencers hope to finish the job by 2010.

Reliving the ’Frisco Quake

Scientists have created a series of simulations that describe in unprecedented detail the shaking and rippling of San Francisco during the massive earthquake that struck on 18 April 1906.

A consortium of government, industry, and university researchers started with a new U.S. Geological Survey (USGS) model of northern California that has geologic data on the nearby faults, including the San Andreas, extending as far as 45 kilometers below the surface. To digitally recreate the event, they added original seismic data, USGS ground measurements taken after the quake, and reports of shaking culled in the aftermath of the event.

Shawn Larsen, a seismologist and computer scientist at Lawrence Livermore National Laboratory who participated in the 2-year effort, says the simulation has yielded a new understanding of how seismic energy traveled east from the quake’s epicenter just off the coast and shook California’s central valley. Running hypothetical quakes of the same magnitude (roughly 7.8) with epicenters further north yielded terrifying results: “even stronger” ground shaking in San Francisco, Larsen says.

Previous models have given insights into other, smaller quakes, but this one required powerful machines like Livermore’s 4000-processor Thunder supercomputer. David Wald of USGS, who was not part of Larsen’s team, calls the simulation “the most comprehensive effort to date on this earthquake” and says it lays the groundwork for advances in mitigating future quake damage. The simulation was to be unveiled in San Francisco this week at a conference commemorating the 100th anniversary of the earthquake.

ON THE GO IN CALIFORNIA >>

Things are looking up stem cell–wise in California, which has been stymied by lawsuits in its attempt to become a world stem cell power. Last week, the California Institute for Regenerative Medicine (CIRM) announced that its first-ever grant checks were in the mail.

Although bond sales for the $3 billion stem cell initiative are stalled, CIRM’s board chair Robert Klein has rounded up $14 million from buyers of “bond anticipation notes.” The first checks went out last week: $12.1 million for research training grants at 16 universities and research institutes. Klein said he had commitments for all but $4 million of the $50 million he is trying to raise. “We expect to have funds for a major new grant program later this year,” he said at a 10 April press conference in San Francisco.

The same day, the University of California, San Diego, formalized a research collaboration with Australia’s main stem cell matrix: Monash University and the Australian Stem Cell Centre in Melbourne, Victoria. Victoria is putting $35 million into a new Australian Regenerative Medicine Institute at Monash.

Red Face for Johns Hopkins

Bad publicity has Johns Hopkins Medicine in Baltimore, Maryland, backpedaling from an alliance it forged with a cosmetics company, New York–based Klinger Advanced Aesthetics. Johns Hopkins is mentioned in promotional material for a new line of skin-care products, sold at Sephora, an upscale chain of beauty stores. The Sephora Web site touted Cosmedicine products as “the only skin-care line” whose clinical testing was done “in consultation with Johns Hopkins Medicine.”

But after the agreement was revealed 2 weeks ago in The Wall Street Journal, Johns Hopkins announced that it would no longer take equity in Klinger or a seat on the company’s board of directors as planned. The university is also withdrawing its use of its name except “on product packages and in previously printed promotional material.”

“The relationship evolved over several years” with “appropriate internal reviews,” says Johns Hopkins spokesperson Joann Rogers. “Hopkins did not and does not endorse the products.” However, she says, those reviews, which didn’t cover conflicts of interest because no Johns Hopkins research is involved, “did not fully anticipate the public’s perception” of the relationship. Mildred Cho, a bioethicist at Stanford University in California, says the changes are a “turnaround” but argues that any use of the Johns Hopkins name is “still implicit endorsement.” Johns Hopkins is getting consulting fees—it declines to name the amount—for suggesting study designs and reviewing results.