

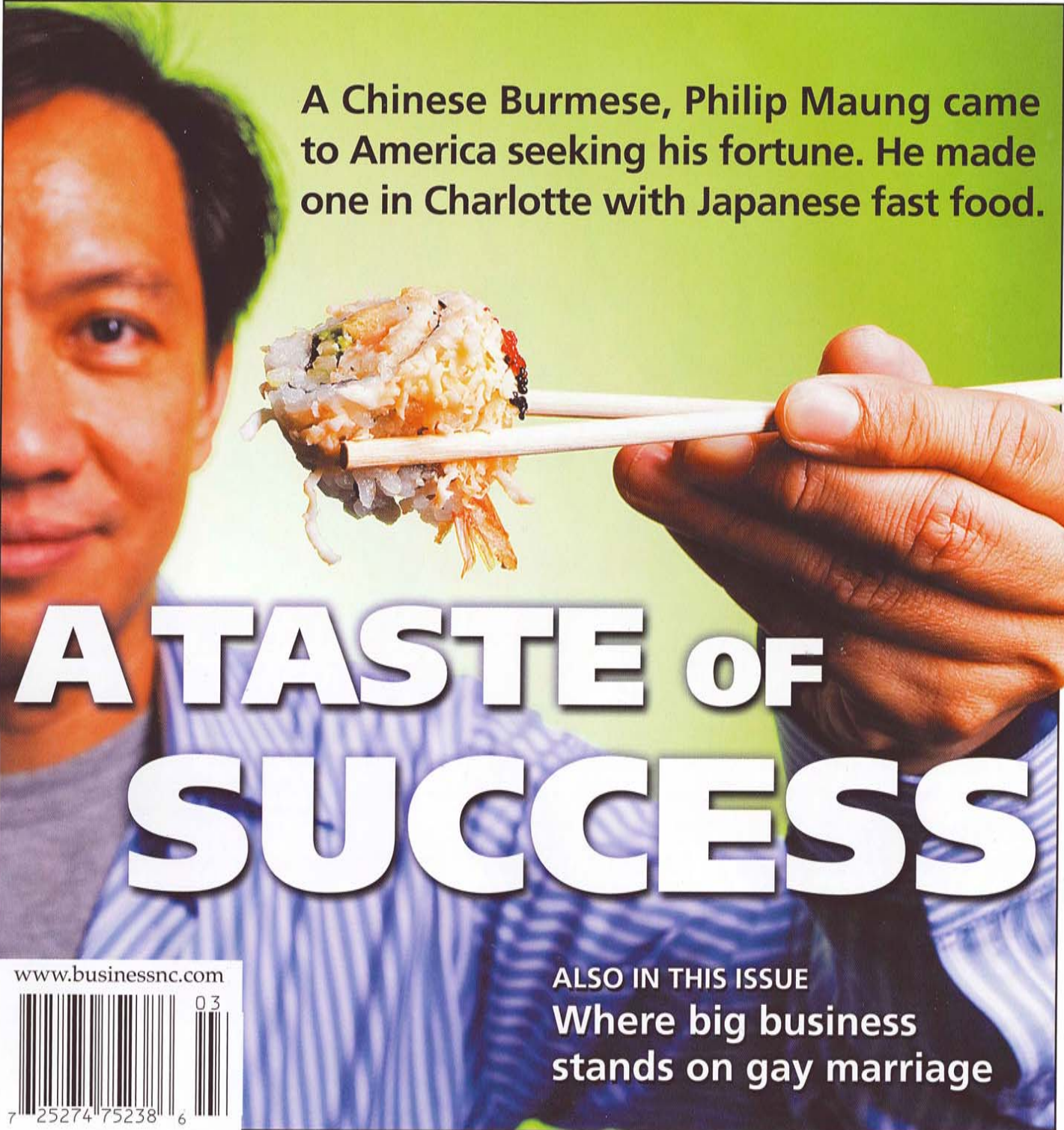
TOP TAR HEEL HOSPITALS

March 2012

Price: \$3.95

BUSINESS

N O R T H C A R O L I N A



A Chinese Burmese, Philip Maung came to America seeking his fortune. He made one in Charlotte with Japanese fast food.

A TASTE OF SUCCESS

www.businessnc.com



ALSO IN THIS ISSUE

Where big business
stands on gay marriage

Companies are high on the hog

Beginning this year, state law mandates that public utilities generate a portion of their power with swine and poultry waste, which can be converted to methane that fuels turbines. At the same time, companies are looking for ways to reduce their greenhouse-gas emissions, which lead to global warming. Cavanaugh & Associates PA, a Winston-Salem engineering firm, believes it has developed an answer to both problems.

In 2006 — as the General Assembly was mulling over a bill, which it passed a year later, that would require utilities to use renewable energy — Duke University's Nicholas School of the Environment asked Cavanaugh to design a swine-waste system that would generate electricity while protecting the environment. Construction began in 2010 at Loyd Ray Farms, a 9,000-hog operation on about 150 acres near Yadkinville, and was completed last May. The system collects about 80,000 gallons of waste a day in an oxygen-free digester. Bacteria convert organic material into methane, which is trapped under a plastic cover. A compressor pushes the biogas into a generator, which powers the system and half the farm. So far, energy generation is exceeding expectations.

Loyd Ray Farms benefits by getting free electricity, but the construction costs are too expensive — about \$800,000 — for most farmers. What makes it feasible on a larger scale is the advantages it affords big business. Although Duke University and U.S. Department of Agriculture grants paid for most of it, Duke Energy Corp. kicked in \$117,500, plus \$30,000 a year for operations and maintenance. In return, the Charlotte-based utility earns credit toward its renewable- and swine-energy requirements.

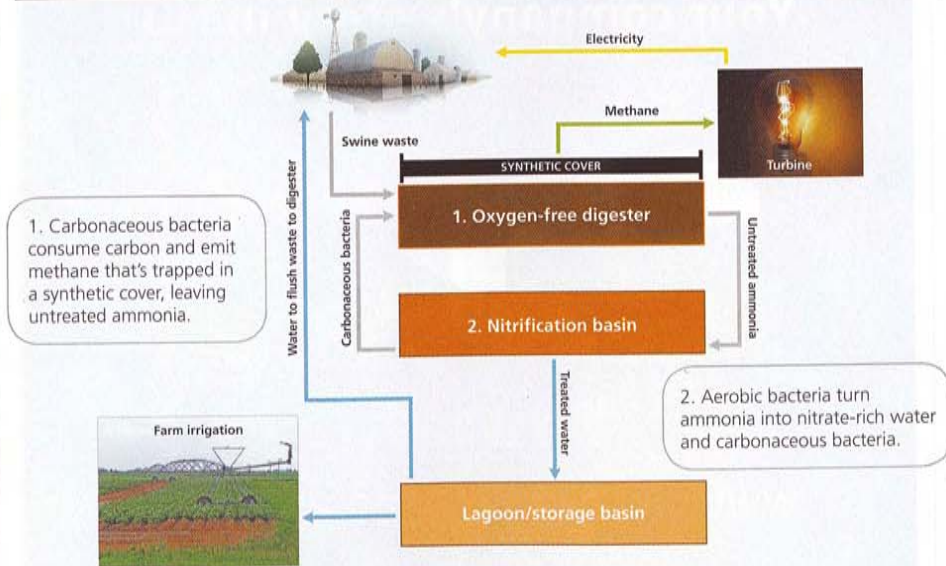
Another attribute of the Loyd Ray Farms system is that the combustion of methane to create electricity reduces greenhouse-gas emissions by a factor of 21. This attracted Google Inc. and Duke University, who want to be carbon-neutral. In exchange for their investments in the project, they get carbon offsets, which symbolically reduce their overall emissions.

The annual reduction in greenhouse gases by Loyd Ray Farms' waste-treatment system is equivalent to carbon-dioxide emissions from:

- 18,677 passenger vehicles
- 221,522 barrels of oil consumed
- 519 railcars worth of coal burned

Source: Cavanaugh & Associates

How It Works Loyd Ray Farms' pig-poop power system



\$1.9 billion

Wake Forest Baptist Medical Center's direct economic impact on Forsyth County in the fiscal year that ended June 30, 2011, according to a study the Winston-Salem-based hospital system commissioned. With more than 11,000 employees in the county, it was Forsyth's largest employer.

After layoffs that began in February, Reynolds American Inc.'s Triad workforce will have decreased 83.9% since 1983.



500 Jobs Greensboro-based Solstas Lab Partners LLC will add over five years to its High Point office, where it employs 860, the largest job expansion in the city in 13 years. The city and Guilford County have approved up to \$500,000 each in incentives, while the state will add \$450,000. The average annual wage will be \$45,000, higher than Guilford's \$39,520.