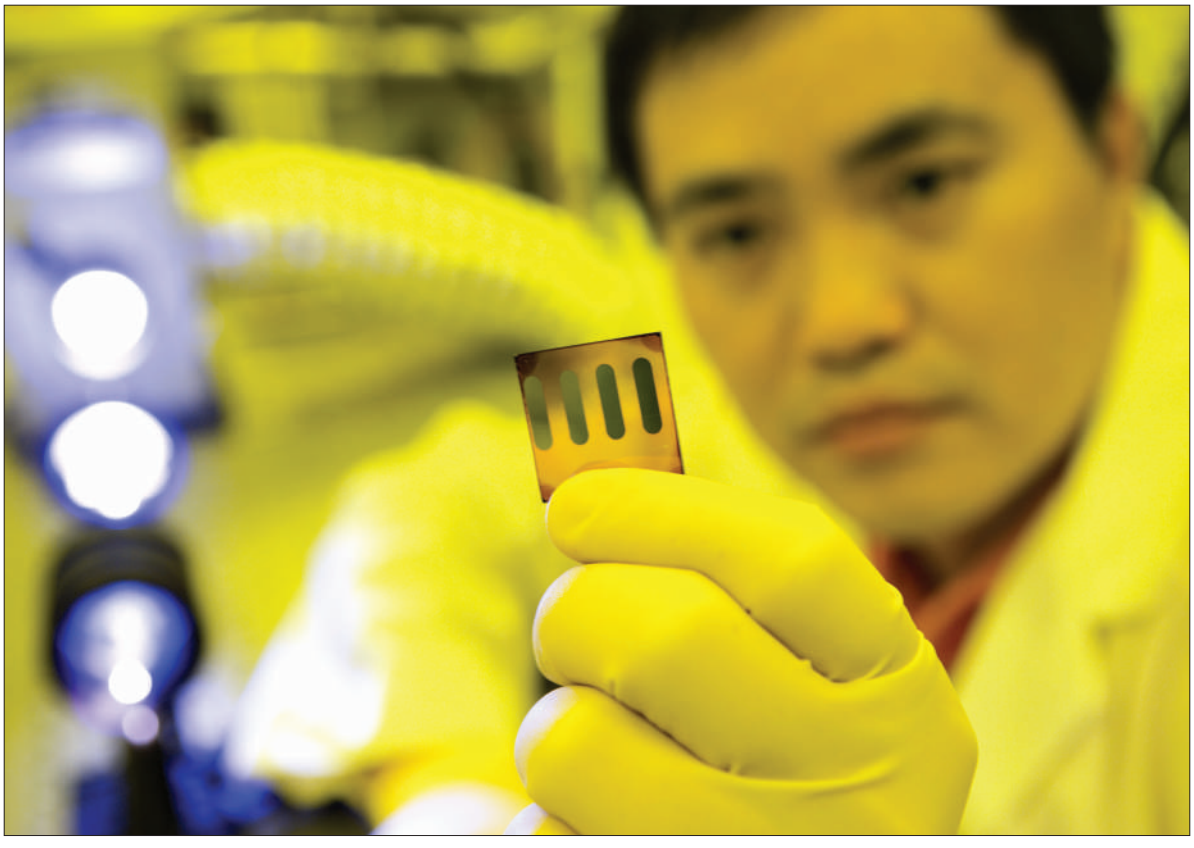

Singapore Journal of

Scientific Research

ISSN: 2010-006x

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Psychologists Find Skill in Recognizing Faces Peaks After Age 30

Scientists have made the surprising discovery that our ability to recognize and remember faces peaks at age 30 to 34, about a decade later than most of our other mental abilities.

Researchers Laura T. Germine and Ken Nakayama of Harvard University and Bradley Duchaine of Dartmouth College will present their work in a forthcoming issue of the journal Cognition.

While prior evidence had suggested that face recognition might be slow to mature, Germine says few scientists had suspected that it might continue building for so many years into adulthood. She says the late-blooming nature of face recognition may simply be a case of practice making perfect.

"We all look at faces, and practice face-watching, all the time," says Germine, a Ph.D. student in psychology at Harvard. "It may be that the parts of the brain we use to recognize faces require this extended period of tuning in early adulthood to help us learn and remember a wide variety of different faces."

Germine, Duchaine, and Nakayama used the web-based Cambridge Face Memory Test -- available at www.testmybrain.org -- to test recognition of computer-generated faces among some 44,000 volunteers ages 10 to 70. They found that skill at other mental tasks, such as remembering names, maxes out at age 23 to 24, consistent with previous research.

But on a face-recognition task, skill rose sharply from age 10 to 20, then continued increasing more slowly throughout the 20s, reaching a peak of 83 percent correct responses in the cohort ages 30 to 34.

A follow-up experiment involving computer-generated children's faces found a similar result, with the best face recognition seen among individuals in their early 30s. After this, skill in recognizing faces declined slowly, with the ability of 65-year-olds roughly matching that of 16-year-olds.

"Research on cognition has tended to focus on development, to age 20, and aging, after age 55," Germine says. "Our work shows that the 35 years in between, previously thought to be fairly static, may in fact be more dynamic than many scientists had expected."

Germine, Duchaine, and Nakayama's research was sponsored by the National Science Foundation and the Economic and Social Research Council.

Laura T. Germine, Bradley Duchaine, Ken Nakayama. Where cognitive development and aging meet: Face learning ability peaks after age 30 ™. Cognition, 2010; DOI: 10.1016/j.cognition.2010.11.002