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The features marked with a star (*) are based entirely on material taken straight from standard research (and other Official and Therefore Always Correct) literature. Many of the other articles are genuine, too, but we don't know which ones.

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Where There's More

There's always new improbable — it's not what you expect! — stuff on the **Improbable Research blog** at [IMPROBABLE.COM](https://www.improbable.com)

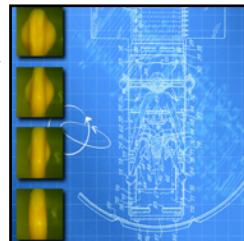
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category/the-weekly-improbable-research-podcast/](https://www.improbable.com/category/the-weekly-improbable-research-podcast/)

On the Front Cover

On the right: Technical drawing from U.S. Patent #3,216,423, issued to George and Charlotte Blonsky for their device to aid women in giving birth — the woman is strapped onto a circular table, and the table is then rotated at high speed. The Blonskys were posthumously awarded an Ig Nobel Prize for it, in 1999.

On the left: Spinning egg yolks (see page 13).



On the Back Cover

Observers on a street in New York City, 2021. Photo by A.S. Kaswell.



Some Coming Events

The Covid-19 pandemic has introduced excitingly boundless uncertainty as to whether, when, and where public activities will happen in the near future. In 2022 some will happen teledistantly.

(See [IMPROBABLE.COM](https://www.improbable.com) for details of these and other events.)

June 25-September 11, 2022

— Ig Nobel Prizes exhibition, Taipei, Taiwan

September 1, 2022

— Chicon, Chicago, Illinois, USA

September 13, 2022

— MIT, Cambridge, Massachusetts, USA

September 15, 2022

— THE 32ND FIRST ANNUAL IG NOBEL PRIZE CEREMONY (WEBCAST)

October 12 - November 13, 2022

— Ig Nobel Prizes exhibition, Osaka, Japan

October 12, 2022

— Café Scientifique, Muret, France



MAY WE RECOMMEND: LIGHTS, FOOD, ROTATING CHAIR, EARMUFFS

An item that merits an extra look

by Danjur Karkummin, *Improbable Research staff*

"Human Magnetic Sense Is Mediated by a Light and Magnetic Field Resonance-Dependent Mechanism," Kwon-Seok Chae, Soo-Chan Kim, Hye-Jin Kwon, and Yongkuk Kim, *Scientific Reports*, vol. 12, no. 8997, 2022. (Thanks to Tony Tweedale for bringing this to our attention.) The authors, at Kyungpook National University and at Hankyong National University, Republic of Korea, report:

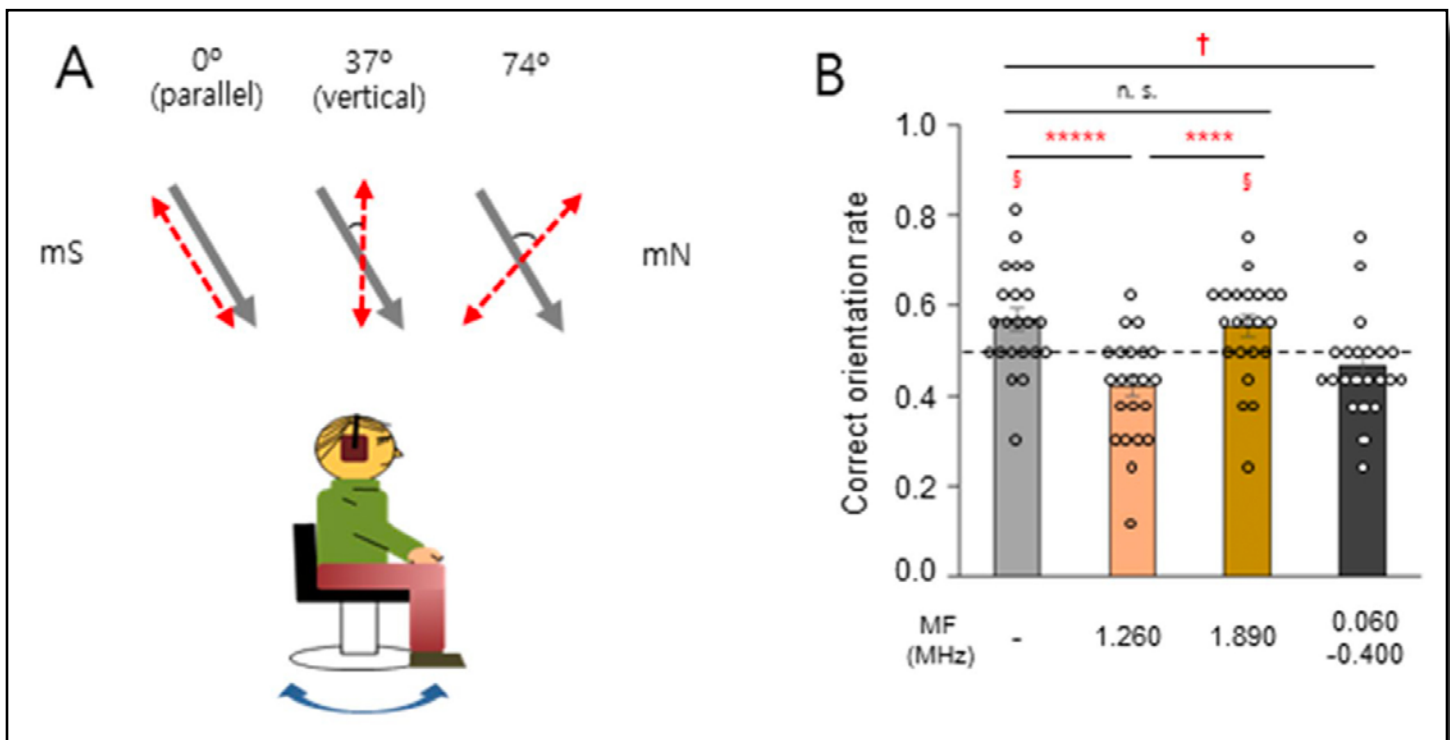
Here, we demonstrate that a magnetic field resonance mechanism mediates light-dependent magnetic orientation in men, using a rotary chair experiment combined with a two-alternative forced choice paradigm....

During the association phase of the experiment, subjects with eyes closed and wearing earmuffs were aligned by experimenters so as to face ambient magnetic north while sitting on a rotatable chair and were either conditioned to associate this direction with food or were not conditioned, depending on the session.

This study cited the Ig Nobel Prize winning (in 2014) study "Dogs Are Sensitive to Small Variations of the Earth's Magnetic Field," Vlastimil Hart, Petra Nováková, Erich Pascal Malkemper, Sabine Begall, Vladimír Hanzal, Miloš Ježek, Tomáš Kušta, Veronika Němcová, Jana Adámková, Kateřina Benediktová, Jaroslav Červený, and Hynek Burda, *Frontiers in Zoology*, vol. 10, no. 80, December 27, 2013.



Kwon-Seok Chae, lead author of the study. Drawing by Nan Swift.



Detail from the study.