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Artist’s conception of the complex network of relationships between disease and the human genome. Hundreds of diseases and traits (represented by colored dots) have been mapped to specific chromosomal positions in the genome. Most disease-associated genetic variants fall outside of protein-coding genes, instead affecting the genome’s regulatory circuitry by modifying the DNA “switches” (some of which are depicted here as gray triangles, many others not shown) that control gene activity. See page 1190.

*Image: Rachael Ludwig and John Stamatoyannopoulos*

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Drinking Too Much? Blame Your Glass

http://scim.ag/Harmful-Bacteria

www.sciencenow.org

SCIENCE

Genome Brings Ancient Girl to Life
A Denisovan child sheds light on the evolution of humans and Neandertals.
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SCIENCECAREERS

You Need a Game Plan
J. A. Hobin
Introducing myIDP, the first comprehensive, online tool to help you choose and pursue a science career.
http://scim.ag/myIDPGamePlan

FOCUS: Regulatory Science Innovation—Rethinking the Ph.D.
B. L. Bendler
Overlong and insufficiently focused on available careers, traditional Ph.D. programs clearly need reform: What changes make sense?
http://scim.ag/TGF_Rethinking

SCIENCEPODCAST

On the 7 September Science Podcast: disease and regulatory DNA, treatable autism, reverse brain drain, and more.
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