NIH HUMAN MICROBIOME PROJECT

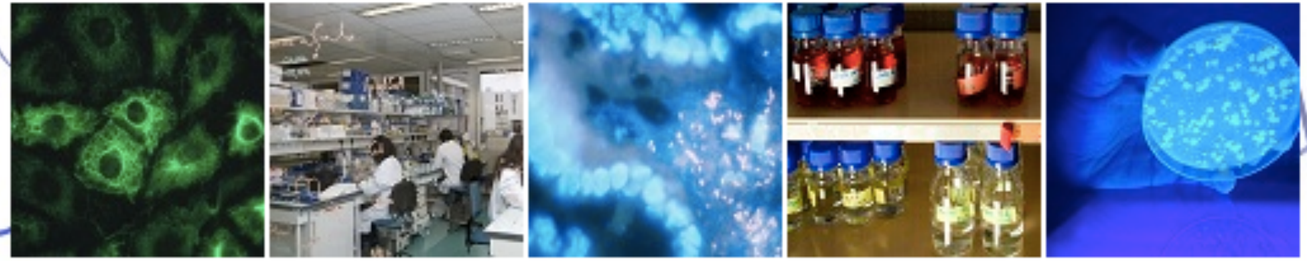
nature immunology

NATURE IMMUNOLOGY | ARTICLE

Lymphotoxin regulates commensal responses to enable diet-induced obesity

Vaibhav Upadhyay, Valeriy Poroyko, Tae-jin Kim, Suzanne Devkota, Sherry Fu, Donald Liu, Alexei V Tumanov, Ekaterina P Koroleva, Liufu Deng, Cathryn Nagler, Eugene B Chang, Hong Tang & Yang-Xin Fu

Affiliations | Contributions | Corresponding author



International Human Microbiome Consortium

nature International weekly journal of science

NATURE | LETTER

Diet rapidly and reproducibly alters the human gut microbiome

Lawrence A. David, Corinne F. Maurice, Rachel N. Carmody, David B. Gootenberg, Julie E. Button, Benjamin E. Wolfe, Alisha V. Ling, A. Sloan Devlin, Yug Varma, Michael A. Fischbach, Sudha B. Biddinger, Rachel J. Dutton & Peter J. Turnbaugh

Affiliations | Contributions | Corresponding author

Nature (2013) | doi:10.1038/nature12820

Received 18 April 2013 | Accepted 29 October 2013 | Published online 11 December 2013

learn.genetics.utah.edu/content/microbiome/disease/

Proceedings of the National Academy of Sciences of the United States of America

PNAS

Metagenomic systems biology of the human gut microbiome reveals topological shifts associated with obesity and inflammatory bowel disease

Sharon Greenblum[a], Peter J. Turnbaugh[b], and Elhanan Borenstein[a,c,d,1]

Author Affiliations

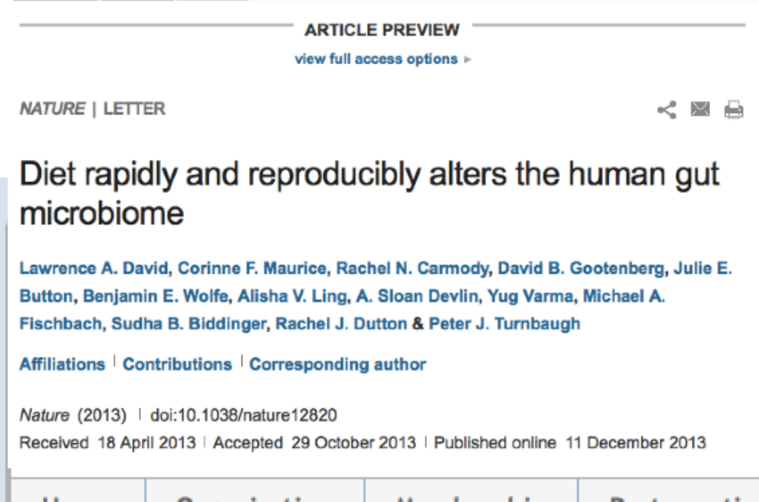
This Issue

January 10, 2012
vol. 109 no. 2
Masthead (PDF)
Table of Contents

PREV ARTICLE NEXT ARTICLE

Don't Miss

- Acne
- Antibiotic-associated diarrhea
- Asthma/allergies
- Autism
- Autoimmune diseases
- Cancer
- Dental cavities
- Depression and anxiety
- Diabetes
- Eczema
- Gastric ulcers
- Hardening of the arteries
- Inflammatory bowel diseases
- Malnutrition
- Obesity



- Acne
- Antibiotic-associated diarrhea
- Asthma/allergies
- Autism
- Autoimmune diseases
- Cancer
- Dental cavities
- Depression and anxiety
- Diabetes
- Eczema
- Gastric ulcers
- Hardening of the arteries
- Inflammatory bowel diseases
- Malnutrition
- Obesity

learn.genetics.utah.edu/content/microbiome/disease/

Bacterial cells can help tumors

REPORT

Potential role of intratumor bacteria in mediating tumor resistance to the chemotherapeutic drug gemcitabine

Leore T. Geller[1,*], Michal Barzily-Rokni[2,*], Tal Danino[3,†], Oliver H. Jonas[4,5], Noam Shental[6], Deborah Nejman[1], Nancy Gavert[1], Yaara Zwang[1], Zachary A. Cooper[7,8,‡], Kevin Shee[2], Christoph A. Thaiss[9], Alexandre Reuben[8], Jonathan Livny[2], Roi Avraham[10], Dennie T. Frederick[11], Matteo Ligorio[12], Kelly Chatman[13], Stephen E. Johnston[2], Carrie M. Mosher[2], Alexander Brandis[14], Garold Fuks[15], Candice Gurbatri[16], Vancheswaran Gopalakrishnan[8], Michael Kim[8], Mark W. Hurd[17], Matthew Katz[8], Jason Fleming[8], Anirban Maitra[18], David A. Smith[2], Matt Skalak[3], Jeffrey Bu[3], Monia Michaud[19], Sunia A. Trauger[13], Iris Barshack[20,21], Talia Golan[21,22], Judith Sandbank[21], Keith T. Flaherty[12], Anna Mandinova[2,23], Wendy S. Garrett[2,19,24], Sarah P. Thayer[25], Cristina R. Ferrone[26], Curtis Huttenhower[2,27], Sangeeta N. Bhatia[2,28,29,30,31,32,33], Dirk Gevers[2,§], Jennifer A. Wargo[7,8], Todd R. Golub[34,35,36,#], Ravid Straussman[1,#,¶]

"**Certain bacteria express enzymes capable of metabolizing the cancer chemotherapeutic drug *gemcitabine* into an inactive form…an effect that was reversed by antibiotic treatment in mice.** A high percentage of human pancreatic ductal adenocarcinomas contain the culprit bacteria (gammaproteobacteria). …Efficacy of an existing therapy for this lethal cancer might be improved by co-treatment with antibiotics."