

## Alexandra Chang-Graham

- Affiliate, Department Funds
- Fellow in Pathology

### Bio

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#### PROFESSIONAL EDUCATION

- M.D., Baylor College of Medicine (2020)
- Ph.D., Baylor College of Medicine , Integrative Molecular and Biomedical Sciences (2019)
- B.A., Amherst College , Chemistry (2010)

### Publications

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#### PUBLICATIONS

- **Comparison of nucleocapsid antigen with strand-specific reverse-transcription PCR for monitoring SARS-CoV-2 infection.** *Journal of clinical virology : the official publication of the Pan American Society for Clinical Virology*  
Chang-Graham, A. L., Sahoo, M. K., Huang, C., Solis, D., Sibai, M., August, G., Calayag, L., Kenji, O. M., Shi, R. Z., Mostafa, H. H., Lei, G. S., Relich, R. F., Pinsky, et al  
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- **Rotavirus induces intercellular calcium waves through ADP signaling.** *Science (New York, N.Y.)*  
Chang-Graham, A. L., Perry, J. L., Engevik, M. A., Engevik, K. A., Scribano, F. J., Gebert, J. T., Danhof, H. A., Nelson, J. C., Kellen, J. S., Strtak, A. C., Sastri, N. P., Estes, M. K., Britton, et al  
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- **Rotavirus Calcium Dysregulation Manifests as Dynamic Calcium Signaling in the Cytoplasm and Endoplasmic Reticulum.** *Scientific reports*  
Chang-Graham, A. L., Perry, J. L., Strtak, A. C., Ramachandran, N. K., Criglar, J. M., Philip, A. A., Patton, J. T., Estes, M. K., Hyser, J. M.  
2019; 9 (1): 10822
- **Human intestinal enteroids with inducible neurogenin-3 expression as a novel model of gut hormone secretion.** *Cellular and molecular gastroenterology and hepatology*  
Chang-Graham, A. L., Danhof, H. A., Engevik, M. A., Tomaro-Duchesneau, C., Karandikar, U. C., Estes, M. K., Versalovic, J., Britton, R. A., Hyser, J. M.  
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- **Parosteal Lipoma Overlying an Osteochondroma of the Hyoid Bone: A Case Report and Literature Review.** *The Laryngoscope*  
Green, A., Wei, E. X., Chang-Graham, A., Holmes, B., Smith, A., Sung, C. K.  
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- **Clinicopathologic Features of Adenocarcinoma Arising in Low-Grade Appendiceal Mucinous Neoplasm**  
Chang-Graham, A., Charville, G.  
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- **Fusobacterium nucleatum Secretes Outer Membrane Vesicles and Promotes Intestinal Inflammation.** *mBio*  
Engevik, M. A., Danhof, H. A., Ruan, W., Engevik, A. C., Chang-Graham, A. L., Engevik, K. A., Shi, Z., Zhao, Y., Brand, C. K., Krystofiak, E. S., Venable, S., Liu, X., Hirschi, et al  
2021; 12 (2)
- **Human-Derived Bifidobacterium dentium Modulates the Mammalian Serotonergic System and Gut-Brain Axis.** *Cellular and molecular gastroenterology and hepatology*

Engevik, M. A., Luck, B., Visuthranukul, C., Ihekweazu, F. D., Engevik, A. C., Shi, Z., Danhof, H. A., Chang-Graham, A. L., Hall, A., Endres, B. T., Haidacher, S. J., Horvath, T. D., Haag, et al  
2021; 11 (1): 221-248

● **Mucin-Degrading Microbes Release Monosaccharides That Chemoattract *Clostridioides difficile* and Facilitate Colonization of the Human Intestinal Mucus Layer.** *ACS infectious diseases*

Engevik, M. A., Engevik, A. C., Engevik, K. A., Auchtung, J. M., Chang-Graham, A. L., Ruan, W., Luna, R. A., Hyser, J. M., Spinler, J. K., Versalovic, J.  
2021; 7 (5): 1126-1142

● ***Bacteroides ovatus* Promotes IL-22 Production and Reduces Trinitrobenzene Sulfonic Acid-Driven Colonic Inflammation.** *The American journal of pathology*

Ihekweazu, F. D., Engevik, M. A., Ruan, W., Shi, Z., Fultz, R., Engevik, K. A., Chang-Graham, A. L., Freeborn, J., Park, E. S., Venable, S., Horvath, T. D., Haidacher, S. J., Haag, et al  
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● **Reuterin disrupts *Clostridioides difficile* metabolism and pathogenicity through reactive oxygen species generation.** *Gut microbes*

Engevik, M. A., Danhof, H. A., Shrestha, R., Chang-Graham, A. L., Hyser, J. M., Haag, A. M., Mohammad, M. A., Britton, R. A., Versalovic, J., Sorg, J. A., Spinler, J. K.  
2020; 12 (1): 1788898

● **Human intestinal enteroids as a model of *Clostridioides difficile*-induced enteritis.** *American journal of physiology. Gastrointestinal and liver physiology*

Engevik, M. A., Danhof, H. A., Chang-Graham, A. L., Spinler, J. K., Engevik, K. A., Herrmann, B., Endres, B. T., Garey, K. W., Hyser, J. M., Britton, R. A., Versalovic, J.  
2020; 318 (5): G870-G888

● **Rotavirus infection induces glycan availability to promote ileum-specific changes in the microbiome aiding rotavirus virulence.** *Gut microbes*

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2020; 11 (5): 1324-1347

● **Enhancing responsiveness of human jejunal enteroids to host and microbial stimuli.** *The Journal of physiology*

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2020; 598 (15): 3085-3105

● **Recovirus NS1-2 Has Viroporin Activity That Induces Aberrant Cellular Calcium Signaling To Facilitate Virus Replication.** *mSphere*

Strtak, A. C., Perry, J. L., Sharp, M. N., Chang-Graham, A. L., Farkas, T., Hyser, J. M.  
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● ***Bifidobacterium dentium* Fortifies the Intestinal Mucus Layer via Autophagy and Calcium Signaling Pathways.** *mBio*

Engevik, M. A., Luk, B., Chang-Graham, A. L., Hall, A., Herrmann, B., Ruan, W., Endres, B. T., Shi, Z., Garey, K. W., Hyser, J. M., Versalovic, J.  
2019; 10 (3)

● **Case Study of Water-Soluble Metal Containing Organic Constituents of Biomass Burning Aerosol** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*

Chang-Graham, A. L., Profeta, L. T. M., Johnson, T. J., Yokelson, R. J., Laskin, A., Laskin, J.  
2011; 45 (4): 1257-1263

● ***Bifidobacterium dentium*-derived  $\gamma$ -glutamylcysteine suppresses ER-mediated goblet cell stress and reduces TNBS-driven colonic inflammation.** *Gut microbes*

Engevik, M. A., Herrmann, B., Ruan, W., Engevik, A. C., Engevik, K. A., Ihekweazu, F., Shi, Z., Luck, B., Chang-Graham, A. L., Esparza, M., Venable, S., Horvath, T. D., Haidacher, et al  
; 13 (1): 1-21