Stanford



Megan Albertelli

Professor of Comparative Medicine

Bio

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Comparative Medicine
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Chair, Department of Comparative Medicine, Stanford University School of Medicine, (2024- present)

HONORS AND AWARDS

- Diplomate, American College of Laboratory Animal Medicine (2008)

PROFESSIONAL EDUCATION

- PhD, University of Michigan , Human Genetics (2007)
- DVM, Michigan State University , Veterinary Medicine (1999)

Teaching

COURSES

2026-27

- Animal Use in Biomedical Research: COMPMED 205 (Win)

2025-26

- Animal Use in Biomedical Research: COMPMED 205 (Win)

2024-25

- Animal Use in Biomedical Research: COMPMED 205 (Spr)

2023-24

- Animal Use in Biomedical Research: COMPMED 205 (Spr)

Publications

PUBLICATIONS

- **A dendritic cell population responsible for transglutaminase 2-mediated gluten antigen presentation in celiac disease.** *JCI insight*
  Yang, F. C., Besser, H. A., Chun, H. R., Albertelli, M., Fernandez-Becker, N. Q., Jabri, B., Khosla, C.

2025

- **A molecular cell atlas of mouse lemur, an emerging model primate.** *Nature*
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  2025

- **Mouse lemur cell atlas informs primate genes, physiology and disease.** *Nature*
  Ezran, C., Liu, S., Chang, S., Ming, J., Guethlein, L. A., Wang, M. F., Dehghannasiri, R., Olivieri, J., Frank, H. K., Tarashansky, A., Koh, W., Jing, Q., Botvinnik, et al
  2025

- **An organism-wide atlas of hormonal signaling based on the mouse lemur single-cell transcriptome.** *Nature communications*
  Liu, S., Ezran, C., Wang, M. F., Li, Z., Awayan, K., Long, J. Z., De Vlaminck, I., Wang, S., Epelbaum, J., Kuo, C. S., Terrien, J., Krasnow, M. A., Ferrell, et al
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- **Azetidine-2-Carboxylic Acid-Induced Oligodendrogliopathy: Relevance to the Pathogenesis of Multiple Sclerosis.** *Journal of neuropathology and experimental neurology*
  Sobel, R. A., Albertelli, M., Hinojoza, J. R., Eaton, M. J., Grimes, K. V., Rubenstein, E.
  2022

- **Fibrous Osteodystrophy, Chronic Renal Disease, and Uterine Adenocarcinoma in Aged Gray Mouse Lemurs (Microcebus murinus).** *Comparative medicine*
  Casey, K. M., Karanewsky, C. J., Pendleton, J. L., Krasnow, M. R., Albertelli, M. A.
  2021; 71 (3): 256-266

- **Hematology and Culture Assessment of Cranially Implanted Rhesus Macaques (Macaca mulatta).** *Comparative medicine*
  Theil, J. H., Johns, J. L., Chen, P., Theil, D. M., Albertelli, M. A.
  2021; 71 (2): 166–76

- **Mechanisms of Azetidine-2-carboxylic Acid (Aze)-Induced Oligodendrogliopathy In Vivo and In Vitro**
  Sobel, R., Albertelli, M., Hinojoza, J., Eaton, M., Grimes, K., Rubenstein, E.
  OXFORD UNIV PRESS INC.2020: 661

- **Other Small New World Monkeys** *EXOTIC ANIMAL LABORATORY DIAGNOSIS*
  Albertelli, M. A.
  edited by Heatley, J. J., Russell, K. E.
  2020: 241-254

- **Breaking up is hard to do: does splitting cages of mice reduce aggression?** *Applied Animal Behaviour Science*
  Blankenberger, W. B., Weber, E. M., Chu, D. K., Geronimo, J. T., Theil, J., Gaskill, B. N., Pritchett-Corning, K., Albertelli, M. A., Garner, J. P., Ahloy-Dallaire, J.
  2018; 206: 94-101

- **The Mouse Lemur, a Genetic Model Organism for Primate Biology, Behavior, and Health.** *Genetics*
  Ezran, C., Karanewsky, C. J., Pendleton, J. L., Sholtz, A., Krasnow, M. R., Willick, J., Razafindrakoto, A., Zohdy, S., Albertelli, M. A., Krasnow, M. A.
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- **Thioredoxin-1 Selectively Activates Transglutaminase 2 in the Extracellular Matrix of the Small Intestine: IMPLICATIONS FOR CELIAC DISEASE.** *journal of biological chemistry*
  Plugis, N. M., Palanski, B. A., Weng, C., Albertelli, M., Khosla, C.
  2017; 292 (5): 2000-2008

- **Prevention of breast cancer skeletal metastases with parathyroid hormone.** *JCI insight*
  Swami, S. n., Johnson, J. n., Bettinson, L. A., Kimura, T. n., Zhu, H. n., Albertelli, M. A., Johnson, R. W., Wu, J. Y.
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- **Tumor Autonomous Effects of Vitamin D Deficiency Promote Breast Cancer Metastasis.** *Endocrinology*
  Williams, J. D., Aggarwal, A., Swami, S., Krishnan, A. V., Ji, L., Albertelli, M. A., Feldman, B. J.
  2016; 157 (4): 1341-1347

- **Vitamin D mitigates the adverse effects of obesity on breast cancer in mice** *ENDOCRINE-RELATED CANCER*
  Swami, S., Krishnan, A. V., Williams, J., Aggarwal, A., Albertelli, M. A., Horst, R. L., Feldman, B. J., Feldman, D.
  2016; 23 (4): 251-264

- **Inhibition of Mouse Breast Tumor-Initiating Cells by Calcitriol and Dietary Vitamin D** *MOLECULAR CANCER THERAPEUTICS*
  Jeong, Y., Swami, S., Krishnan, A. V., Williams, J. D., Martin, S., Horst, R. L., Albertelli, M. A., Feldman, B. J., Feldman, D., Diehn, M.
  2015; 14 (8): 1951-1961

- **Echocardiographic and Electrocardiographic Characteristics of Male and Female Squirrel Monkeys (Saimiri spp.).** *Journal of the American Association for Laboratory Animal Science*
  Huss, M. K., Ikeno, F., Buckmaster, C. L., Albertelli, M. A.
  2015; 54 (1): 25-28

- **Discovery of Potent and Specific Dihydroisoxazole Inhibitors of Human Transglutaminase 2** *JOURNAL OF MEDICINAL CHEMISTRY*
  Kloeck, C., Herrera, Z., Albertelli, M., Khosla, C.
  2014; 57 (21): 9042-9064

- **Discovery of potent and specific dihydroisoxazole inhibitors of human transglutaminase 2.** *Journal of medicinal chemistry*
  Klöck, C., Herrera, Z., Albertelli, M., Khosla, C.
  2014; 57 (21): 9042-9064

- **Abdominal Lipomatosis with Secondary Self-Strangulation of Masses in an Adult Rhesus Macaque (Macaca mulatta)** *COMPARATIVE MEDICINE*
  Chum, H. H., Long, C. T., McKeon, G. P., Chang, A. G., Luong, R. H., Albertelli, M. A.
  2014; 64 (5): 404-408

- **Abdominal lipomatosis with secondary self-strangulation of masses in an adult rhesus macaque (Macaca mulatta).** *Comparative medicine*
  Chum, H. H., Long, C. T., McKeon, G. P., Chang, A. G., Luong, R. H., Albertelli, M. A.
  2014; 64 (5): 404-408

- **CYP3A4-Catalyzed Simvastatin Metabolism as a Non-Invasive Marker of Small Intestinal Health in Celiac Disease.** *American journal of gastroenterology*
  Morón, B., Verma, A. K., Das, P., Taavela, J., Dafik, L., DiRaimondo, T. R., Albertelli, M. A., Kraemer, T., Mäki, M., Khosla, C., Rogler, G., Makharia, G. K.
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- **Dietary Vitamin D-3 and 1,25-Dihydroxyvitamin D-3 (Calcitriol) Exhibit Equivalent Anticancer Activity in Mouse Xenograft Models of Breast and Prostate Cancer** *ENDOCRINOLOGY*
  Swami, S., Krishnan, A. V., Wang, J. Y., Jensen, K., Horst, R., Albertelli, M. A., Feldman, D.
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- **Activation and Inhibition of Transglutaminase 2 in Mice** *PLOS ONE*
  Dafik, L., Albertelli, M., Stamnaes, J., Sollid, L. M., Khosla, C.
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- **Inhibitory effects of calcitriol on the growth of MCF-7 breast cancer xenografts in nude mice: selective modulation of aromatase expression in vivo.** *Hormones & cancer*
  Swami, S., Krishnan, A. V., Wang, J. Y., Jensen, K., Peng, L., Albertelli, M. A., Feldman, D.
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- **Comparison of rectal and tympanic core body temperature measurement in adult Guyanese squirrel monkeys (Saimiri sciureus sciureus)** *JOURNAL OF MEDICAL PRIMATOLOGY*
  Long, C. T., Pacharinsak, C., Jampachaisri, K., McKeon, G. P., Howard, A. M., Albertelli, M. A., Felt, S. A.
  2011; 40 (2): 135-141

- **Uterine Leiomyoma in a Guyanese Squirrel Monkey (Saimiri sciureus sciureus)** *JOURNAL OF THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE*
  Long, C. T., Luong, R. H., McKeon, G. P., Albertelli, M. A.
  2010; 49 (2): 226-230

- **Profiling Human Androgen Receptor Mutations Reveals Treatment Effects in a Mouse Model of Prostate Cancer** *MOLECULAR CANCER RESEARCH*
  O'Mahony, O. A., Steinkamp, M. P., Albertelli, M. A., Brogley, M., Rehman, H., Robins, D. M.
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- **X-linked inhibitor of apoptosis deficiency in the TRAMP mouse prostate cancer model** *CELL DEATH AND DIFFERENTIATION*
  Hwang, C., Oetjen, K. A., Kosoff, D., Wojno, K. J., Albertelli, M. A., Dunn, R. L., Robins, D. M., Cooney, K. A., Duckett, C. S.
  2008; 15 (5): 831-840

- **Androgen receptor variants and prostate cancer in humanized AR mice** *12th International Congress on Hormonal Steroids and Hormones and Cancer*
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- **Glutamine tract length of human androgen receptors affects hormone-dependent and -independent prostate cancer in mice** *HUMAN MOLECULAR GENETICS*
  Albertelli, M. A., O'Mahony, O. A., Brogley, M., Tosoian, J., Steinkamp, M., Daignault, S., Wojno, K., Robins, D. M.
  2008; 17 (1): 98-110

- **Androgen-dependent pathology demonstrates myopathic contribution to the Kennedy disease phenotype in a mouse knock-in model** *JOURNAL OF CLINICAL INVESTIGATION*
  Yu, Z., Dadgar, N., Albertelli, M., Gruis, K., Jordan, C., Robins, D. M., Lieberman, A. P.
  2006; 116 (10): 2663-2672

- **Replacing the mouse androgen receptor with human alleles demonstrates glutamine tract length-dependent effects on physiology and tumorigenesis in mice** *MOLECULAR ENDOCRINOLOGY*
  Albertelli, M. A., Scheller, A., Brogley, M., Robins, D. M.
  2006; 20 (6): 1248-1260

- **Abnormalities of germ cell maturation and sertoli cell cytoskeleton in androgen receptor 113 CAG knock-in mice reveal toxic effects of the mutant protein** *AMERICAN JOURNAL OF PATHOLOGY*
  Yu, Z. G., Dadgar, N., Albertelli, M., Scheller, A., ALBIN, R. L., Robins, D. M., Lieberman, A. P.
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- **Shape-defining scaffolds for minimally invasive tissue engineering** *TRANSPLANTATION*
  Thornton, A. J., Alsberg, E., Albertelli, M., Mooney, D. J.
  2004; 77 (12): 1798-1803