



Alex J Goodell

Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine

 Curriculum Vitae available Online

CLINICAL OFFICE (PRIMARY)

- **Anesthesia Department**

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Bio

BIO

Anesthesiologist and internist interested in artificial intelligence and large language models in medicine. Currently, my primary focus is on developing and evaluating applications of large language models to improve the "user experience" of patients (who spend too much time fighting the system that is tasked with healing them) and doctors (who spend too much time fighting the system that is supposed to help them heal others).

Interests:

- Benchmarking LLMs as clinical calculators
- Medical summarization by LLMs
- Agentic /tool-using language models
- GenerativeAI for Medical Education and Simulation
- Data equity in LLMs
- Novel benchmarks for clinical LLMs, including simulation
- Participatory research, open-source software

I'm a Clinical Scholar in the Dept of Anesthesiology and a Post-Doctoral Fellow in Anesthesiology / Biomedical Data Science in the lab of Nima Aghaeepour.

I completed medical school at the UC Berkeley - UCSF Joint Medical Program, followed by the Combined Internal Medicine/Anesthesiology Residency at the Stanford School of Medicine, and a fellowship in Anesthesia Informatics at the Stanford AIM Lab.

CLINICAL FOCUS

- Anesthesia
- Geriatric anesthesia

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine

PROFESSIONAL EDUCATION

- Board Certification: Internal Medicine, American Board of Internal Medicine (2023)
- Fellowship, Anesthesia Informatics and Media Lab, Stanford University , Anesthesia Informatics (2024)
- Certificate, Hasso Plattner Institute of Design, Stanford University , Design Thinking (Executive Education Bootcamp) (2023)
- Residency in Anesthesiology, Anesthesiology Residency, Stanford University , Anesthesiology (2023)
- DABIM, Internal Medicine Residency, Stanford University , Internal Medicine (2023)
- MD, University of California San Francisco , Medicine; Veteran's Affairs Clinical Track (2018)
- MS, University of California Berkeley , Health and Medical Sciences; focus in epidemiology and health economics (2016)
- BS, University of Oregon , Biology (2010)

LINKS

- Personal website: <https://alexgoodell.com>

Publications

PUBLICATIONS

- **Large language model agents can use tools to perform clinical calculations.** *NPJ digital medicine*
Goodell, A. J., Chu, S. N., Rouholiman, D., Chu, L. F.
2025; 8 (1): 163
- **Enhancing the Readability of Preoperative Patient Instructions Using Large Language Models.** *Anesthesiology*
Hong, H. J., Schmiesing, C. A., Goodell, A. J.
2024; 141 (3): 608-610
- **Prevalence, mutational spectrum and clinical implications of clonal hematopoiesis of indeterminate potential in plasma cell dyscrasias.** *Seminars in oncology*
Testa, S., Kumar, J., Goodell, A. J., Zehnder, J. L., Alexander, K. M., Sidana, S., Arai, S., Witteles, R. M., Liedtke, M.
2022
- **Modeling the Impact of Recommendations for Primary Care-Based Screening for Latent Tuberculosis Infection in California.** *Public health reports (Washington, D.C. : 1974)*
Parriott, A., Kahn, J. G., Ashki, H., Readhead, A., Barry, P. M., Goodell, A. J., Flood, J., Shete, P. B.
2020; 135 (1_suppl): 172S-181S
- **Outlook for tuberculosis elimination in California: An individual-based stochastic model.** *PloS one*
Goodell, A. J., Shete, P. B., Vreman, R., McCabe, D., Porco, T. C., Barry, P. M., Flood, J., Marks, S. M., Hill, A., Cattamanchi, A., Kahn, J. G.
2019; 14 (4): e0214532
- **Health and economic benefits of reducing sugar intake in the USA, including effects via non-alcoholic fatty liver disease: a microsimulation model.** *BMJ open*
Vreman, R. A., Goodell, A. J., Rodriguez, L. A., Porco, T. C., Lustig, R. H., Kahn, J. G.
2017; 7 (8): e013543
- **Where teachers are few: documenting available faculty in five Tanzanian medical schools.** *Global health action*
Mkony, C. A., Kaaya, E. E., Goodell, A. J., Macfarlane, S. B.
2016; 9: 32717
- **Modeling solutions to Tanzania's physician workforce challenge.** *Global health action*
Goodell, A. J., Kahn, J. G., Ndeki, S. S., Kaale, E., Kaaya, E. E., Macfarlane, S. B.
2016; 9: 31597

- **Babesia screening: the importance of reporting and calibration in cost-effectiveness models.** *Transfusion*
Goodell, A. J., Bloch, E., Simon, M. S., Shaz, B., Custer, B.
2016; 56 (3): 774-5
- **Costs, consequences, and cost-effectiveness of strategies for Babesia microti donor screening of the US blood supply.** *Transfusion*
Goodell, A. J., Bloch, E. M., Krause, P. J., Custer, B.
2014; 54 (9): 2245-57
- **An institutional research agenda: focusing university expertise in Tanzania on national health priorities.** *Journal of public health policy*
Masalu, J. R., Aboud, M., Moshi, M. J., Mugusi, F., Kamuhabwa, A., Mjimwa, N., Freeman, P., Goodell, A. J., Kaaya, E. E., Macfarlane, S. B.
2012; 33 Suppl 1: S186-201
- **Tracking university graduates in the workforce: information to improve education and health systems in Tanzania.** *Journal of public health policy*
Pemba, S., Macfarlane, S. B., Mpembeni, R., Goodell, A. J., Kaaya, E. E.
2012; 33 Suppl 1: S202-15