Curriculum Vitae Annelies Pieterman-Bos

I am an educational researcher in life sciences education research. My specific interest is in critical thinking in science and broadening life sciences students' perspectives with perspectives from the humanities and social sciences. My work relates to education about philosophy of science, the interface between science and society, ethics, science communication, Open Science, and data science.

At the moment, I am a postdoc at the Education Centre of the UMC Utrecht. In addition to my research work, I coordinate an impulse team within "De Nieuwe Utrechtse School." The objectives of this team are to increase understanding of the research process among various educational researchers in the UMCU, to improve the dissemination and valorisation of educational research, and to develop and implement a workflow to support evidence-informed innovation and educational research in the UMCU.

In addition, I am project leader of an USO project in the Faculty of Science focused on developing courses in practice-oriented history and philosophy of science for master's students in the Graduate School of the Life Sciences and the Graduate School of the Natural Sciences.

Further, I am part of the Community for Open Science in Education, which brings together educators with a shared ambition to integrate the core values of Open Science into higher education. Within this team, I conduct educational research on developing transferable pedagogies for an Open Science mindset.

Degrees and Experience

2025:	Doctor of Philosophy, Life Sciences Education Research
2019	Master of Science, Molecular and Cellular Medicine
2018	Research internship in the lab of Yvonne Vercoulen, Mass Cytometry, Image Analysis
2017	Research internship in the lab of Bert Janssen, Protein structures
2016	Bachelor of Science, Medicine with a minor in Biomedical Sciences and elective courses in philosophy.

Research outputs

Fostering Critical Thinking Through Interdisciplinary and Transdisciplinary Education—A Boundary-Crossing Approach in Biomedical Science Education
Gerrits, E. M., Reincke, C. M., Pieterman-Bos, A. & Van Mil, M. H. W., Feb 2026, In: Education Sciences. 16, 2, 20 p., 348.

Learning (how) to listen: a key aspect in training future scientists for meaningful dialogue with society
Reincke, C., Pieterman-Bos, A., Bredenoord, A. & van Mil, M., 2025, In: International Journal of Science Education, Part B: Communication and Public Engagement. 15, 2, p. 183-198 16 p.

Understanding epistemological notions underlying scientific language use: a multifaceted analysis framework
Pieterman-Bos, A., Reincke, C. M., van de Schoot, R. & van Mil, M. H. W., 3 Sept 2024, In: Frontiers in Education. 9, 1452111.

Identifying focus areas for science communication training in the context of undergraduate science education
Reincke, C. M., Pieterman-Bos, A. & van Mil, M. H. W., 2024, In: International Journal of Science Education, Part B: Communication and Public Engagement. 14, 4, p. 450-464 15 p.

Integration of Philosophy of Science in Biomedical Data Science Education to Foster Better Scientific Practice
Pieterman-Bos, A. & van Mil, M., Dec 2023, In: Science & Education. 32, 6, p. 1709-1738 30 p.

MATISSE: a method for improved single cell segmentation in imaging mass cytometry
Baars, M. J. D., Sinha, N., Amini, M., Pieterman-Bos, A., van Dam, S., Ganpat, M. M. P., Laclé, M. M., Oldenburg, B. & Vercoulen, Y., Dec 2021, In: BMC Biology. 19, 1, p. 1-10 99.