

Stanford

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Jennifer is a scientist with more than a decade's experience in identifying research needs in energy and shaping the energy research agenda at Stanford. She joined the Global Climate and Energy Project in 2007, as an energy analyst, where she led the bioenergy area of the portfolio. She now leads the Advanced Research Projects at the Precourt Institute for Energy, working with the Director of Precourt and other stakeholders to foster energy research at Stanford. In 2023, Jennifer joined the technology team of the Sustainability Accelerator, helping to identify solutions for real-world impact across broad sustainability challenges.

Jennifer is a technical resource for energy related and carbon removal projects across the University and advisor in the bioenergy area. Prior to joining Global Climate and Energy Project in 2007, she was a post-doctoral scholar at the Carnegie Institution for Science, Department of Plant Biology, at Stanford University, working on plant cell wall polysaccharides and biomass related projects. She holds a Ph.D. in Biology from the University of York, U.K. and a Bachelor of Science in Biochemistry (First Class Honors) from the University of Stirling, U.K.

EDUCATION AND CERTIFICATIONS

- Ph.D., University of York , Biology (2001)
- B.Sc., (First Class Honors), University of Stirling, U.K. , Biochemistry (1997)

Publications

PUBLICATIONS

• **Research priorities for negative emissions** *ENVIRONMENTAL RESEARCH LETTERS*

Fuss, S., Jones, C. D., Kraxner, F., Peters, G. P., Smith, P., Tavoni, M., van Vuuren, D. P., Canadell, J. G., Jackson, R. B., Milne, J., Moreira, J. R., Nakicenovic, N., Sharifi, et al
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• **Simulating the Earth system response to negative emissions** *ENVIRONMENTAL RESEARCH LETTERS*

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• **Biophysical and economic limits to negative CO₂ emissions** *NATURE CLIMATE CHANGE*

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• **Algal Technologies for Biological Capture and Utilization of CO₂ Require Breakthroughs in Basic Research** *Symposium on Perspectives on Biofuels: Potential Benefits and Possible Pitfalls / 239th National Meeting of the American-Chemical-Society*

Milne, J. L., Cameron, J. C., Page, L. E., Benson, S. M., Pakrasi, H. B.
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• **Mutations in UDP-Glucose:Sterol Glucosyltransferase in Arabidopsis Cause Transparent Testa Phenotype and Suberization Defect in Seeds** *PLANT PHYSIOLOGY*

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- **Identification of genes required for cellulose synthesis by regression analysis of public microarray data sets** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Persson, S., Wei, H. R., Milne, J., Page, G. P., Somerville, C. R.

2005; 102 (24): 8633-8638

- **A conserved functional role of pectic polymers in stomatal guard cells from a range of plant species** *PLANTA*

Jones, L., Milne, J. L., Ashford, D., McCann, M. C., McQueen-Mason, S. J.

2005; 221 (2): 255-264

- **Toward a systems approach to understanding plant-cell walls** *SCIENCE*

Somerville, C., Bauer, S., Brininstool, G., Facette, M., Hamann, T., Milne, J., Osborne, E., Paredez, A., Persson, S., Raab, T., Vorwerk, S., Youngs, H.

2004; 306 (5705): 2206-2211

- **Cell wall arabinan is essential for guard cell function** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Jones, L., Milne, J. L., Ashford, D., McQueen-Mason, S. J.

2003; 100 (20): 11783-11788