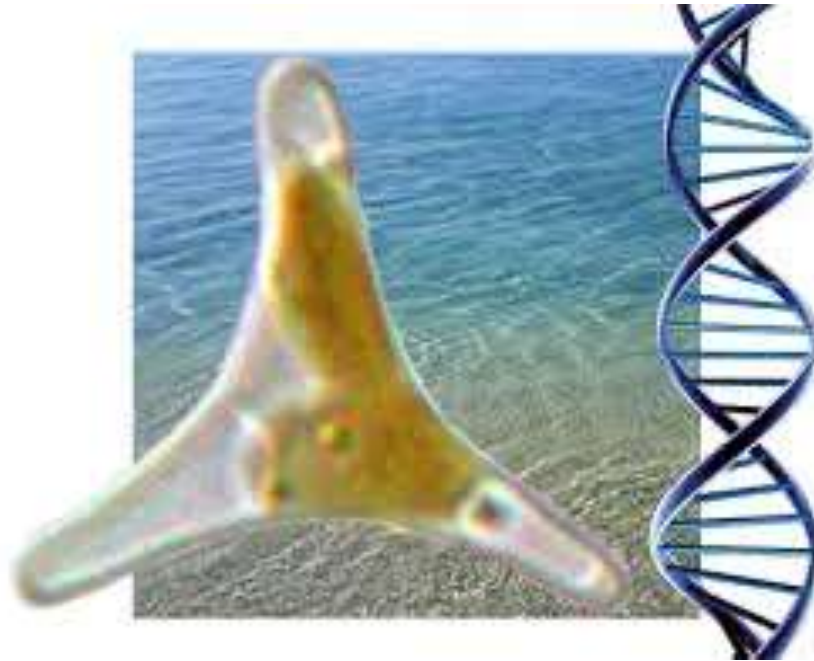


California State University, Fresno, Department of Biology presents

# “The biology and biotechnological potential of diatoms”



About one-fifth of the photosynthesis on Earth is carried out by microscopic, eukaryotic phytoplankton known as diatoms. These photosynthetic workhorses are found in waters worldwide, wherever there is sufficient light and nutrients. Each year, diatom photosynthesis in the sea generates about as much organic carbon as all the terrestrial rainforests combined. But unlike much of the carbon generated by trees, the organic carbon produced by diatoms is consumed rapidly and serves as a base for marine food webs. Besides their ecological importance, diatoms also have significant commercial value since, among other things, they produce lipids rich in polyunsaturated omega-3 fatty acids. In recent years, research on diatoms has accelerated at a rapid pace due to technological advances for genetic modification and improved accessibility of genomic resources and technologies. In this presentation, the emerging picture of the intricate molecular life of diatoms will be explored, and new opportunities for scientific discovery and innovation will be addressed.

**Jeroen Gillard, PhD**

Assistant Professor, California State University Bakersfield

**Friday, September 22, 2017**

3:00 – 4:00 PM

Science 2, room 109

For further information: [www.csufresno.edu/biology](http://www.csufresno.edu/biology)

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**Bio:** Dr. Gillard received a BS in Biology from Hasselt University, Belgium, and went on to earn an MS in Biochemistry at Ghent University in Belgium, and subsequently a Ph.D. in Biology at Ghent University. Specializing in the biology of diatom sexual life cycles, Dr. Gillard uses physiological, genetic, and biochemical approaches. Dr. Gillard received a fellowship from the European Molecular Biology Organization and focused on natural product structural characterizations at Friedrich-Shiller University in Jena before moving to the J. Craig Venter Institute for four years. Dr. Gillard joined the California State University Bakersfield Department of Biology in 2015.

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If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner at the Department of Biology at 278-2001 or e-mail [lgarner@csufresno.edu](mailto:lgarner@csufresno.edu) (at least one week prior to event).