The legacy of the Dreyfus brothers is embodied by the Camille and the Henry Teacher-Scholar awards, which recognize the independent research and teaching accomplishments of outstanding young faculty in the chemical sciences and engineering. Since its start in 1970, the program has recognized nearly 900 of the nation’s most promising scientific leaders.

The Foundation is pleased to reaffirm and expand its support of these young scientists by increasing the Camille Dreyfus Teacher-Scholar award to $100,000 and the Henry Dreyfus Teacher-Scholar award to $75,000 in 2019. This unrestricted and flexible support allows the Teacher-Scholars to direct the funds to the areas where they think it will be most beneficial.

Many from the Teacher-Scholar community gathered at the fifth biennial Teacher-Scholar Symposium in New York City last October. There is always a great deal of excitement at these symposia, and this year it seemed particularly so. As is customary, the most recent Teacher-Scholars presented posters about their research and heard scientific talks by distinguished senior chemists, across a range of topics. These sessions generated stimulating discussions, particularly Jim Anderson’s presentation about his context-based approach to teaching introductory university chemistry.

These scientific talks, as well as 40 brief videos produced by the latest cohort of Teacher-Scholars, are available on the newly redesigned Dreyfus Foundation Web site and on YouTube. The Foundation hopes these videos, presented by both emerging and established leaders in the field, will serve as a resource for those who are interested in the contemporary frontiers of the chemical sciences.

The legacy of Camille and Henry Dreyfus has been further extended with awards to the University of Basel, where Camille and Henry Dreyfus both received their Ph.D.s. Since 2013, the Foundation has funded an annual lectureship to bring distinguished U.S. chemists to their campus. Beginning in 2019, a new Dreyfus scholarship will support an outstanding Ph.D. candidate at the University.

We look forward to more new directions in the year ahead, particularly the nominations for the Dreyfus Prize, which in 2019 will be on the topic of Chemistry in Support of Human Health. The Foundation is pleased to spotlight pioneering chemistry research in this area which has such a positive impact.

Thank you as always for reading, and best wishes to all for 2019.
Dreyfus Teacher-Scholar Symposium

The fifth biennial symposium for the newest Camille and Henry Dreyfus Teacher-Scholars was held at the New York Academy of Sciences on October 26. The symposium provides an opportunity for the recent Dreyfus Teacher-Scholars, leading young faculty in the chemical sciences, to present their research to colleagues, hear distinguished senior Teacher-Scholars speak about their research, and engage in a session on teaching. The recent Teacher-Scholars also each produced a 2-3 minute video about their research and its potential importance, with much of the content aimed at non-scientists. These videos, as well as the in-depth technical talks presented at the symposium, are available on the Foundation Web site and on YouTube.

The speakers were (in sequence):

John Hartwig, University of California, Berkeley: *Accelerating Chemical Synthesis with Catalysis*

Zhenan Bao, Stanford University: *Skin-Inspired Electronic Materials*

Sean Decatur, Kenyon College: *Aggregating Proteins and Coupled Vibrations: A Case for the Integration of Biophysical Chemistry, Problem Solving, and the Liberal Arts*

James Anderson, Harvard University: *Frontiers and Foundations from a Global and Molecular Perspective: A New Approach to Introductory University Chemistry*

Timothy Swager, Massachusetts Institute of Technology: *Molecular Designs for Specificity in Chemical Sensors*

Jean Dreyfus Lectureship for Undergraduate Institutions

The Jean Dreyfus Lectureship provides funding to bring a leading researcher to a primarily undergraduate institution to give a technical lecture in the chemical sciences, a more general lecture that is open to the public, and to meet with students and faculty. The award also provides funding to support two undergraduates in summer research. The program has supported 36 lectures since it was initiated in 2010. These Lectureships were held in 2018:

**Harry Gray** (Caltech) at Providence College: *Powering the Planet: Fuel from Sunlight and Water and Electron Transfer in Proteins*

**David Liu** (Harvard) at Pomona College: *Harnessing Evolution to Solve Problems in Biotechnology and Therapeutic Science and Base Editing: Chemistry on the Genome of Living Cells*


The following lectureships are scheduled for 2019:

**March 25–27:** Jennifer Doudna (UC Berkeley) at Southern Illinois University Edwardsville

**April 9–11:** Karen Anderson (Yale) at Montclair State University

**April 11:** Catherine Drennan (MIT) at Franklin and Marshall College

**October 3–4:** Christy Haynes (U. of Minnesota) at Santa Clara University
2019 Dreyfus Prize to Recognize Chemistry in Support of Human Health

Chemistry in Support of Human Health has been selected as the topic of the 2019 Dreyfus Prize in the Chemical Sciences. The Dreyfus Prize, awarded biennially, recognizes an individual for exceptional and original research in a selected area of chemistry that has advanced the field in a major way. The prize consists of a monetary award of $250,000, a medal, and a certificate.

“Each Dreyfus Prize highlights major accomplishment in a different area of the chemical sciences. We consider, in addition, the promise of benefit to society,” said Matthew Tirrell, chair of the Dreyfus Foundation Scientific Affairs Committee. “In this spirit, there is no greater benefit that chemistry provides to society than the many profound contributions to the science and technology of human health. The field of the chemical sciences is rich with individuals whose work drives our understanding and betterment of human health.”

The deadline for nominations is Thursday, February 28. Further details on the Prize and the nomination procedure are available at the Foundation Web site.

Dreyfus Symposium in Theoretical and Computational Chemistry

The Dreyfus Foundation sponsored a one-day symposium on Theoretical and Computational Chemistry, the topic of the 2017 Dreyfus Prize, at the spring national meeting of the American Chemical Society in New Orleans on March 20, 2018. The distinguished speakers included Michele Parrinello, winner of the 2017 Dreyfus Prize. The symposium was sponsored by the ACS Multidisciplinary Program Planning Group and co-sponsored by the Physical Chemistry and Computers in Chemistry divisions. The Foundation is pleased to have supported this symposium, which featured the following preeminent leaders in the field (in sequence):

Emily Carter, Princeton University: Insights from Ab Initio Potential Energy Surfaces and Molecular Dynamics for Sustainable Energy Technologies

Glenn Fredrickson, University of California, Santa Barbara: Field-Theoretic Simulations: From Advanced Materials to Quantum Liquids

Kendall Houk, University of California, Los Angeles: Dynamics and Mechanisms of Pericyclic Reactions

Mark Ratner, Northwestern University: Metals, Molecules, Mixing, and Mastery

Wolfgang Domcke, Technical University of Munich: How to Burn Water with Sunlight? Insights from Computational Chemistry

Sharon Hammes-Schiffer, Yale University: Proton-Coupled Electron Transfer in Catalysis and Energy Conversion

Roberto Car, Princeton University: Variational Sampling and Renormalization Theory

Michele Parrinello, Università della Svizzera italiana & ETH Zurich: Fluctuations, Entropy, and Rare Events
Dreyfus-Sponsored ACS Awards

The Dreyfus Foundation sponsors two annual awards that are administered by the American Chemical Society: Encouraging Women into Careers into the Chemical Sciences and Encouraging Disadvantaged Students into Careers in the Chemical Sciences. In 2018, these awards were made to Rebecca T. Ruck, Merck & Co., and Jani Ingram, Northern Arizona University, respectively.

Each award consists of $5,000 to the awardee and a grant of $10,000 to an eligible non-profit institution, designated by and in the name of the recipient, to strengthen the objectives of the award. Ruck directed her grant to support women in chemistry programs at both Massachusetts Institute of Technology and Princeton University. Ingram designated her grant to support the Northern Arizona University chemistry department.

The Dreyfus Foundation was recognized for 25 years of support of these two awards at the spring 2018 national meeting of the ACS.

Dreyfus Lectureship at University of Basel

The Foundation honors the heritage of the Dreyfus brothers and promotes scientific exchange between U.S. and Swiss chemists through the annual Dreyfus Lectureship at the University of Basel, where Camille and Henry Dreyfus were awarded their Ph.D.s. David MacMillan, the James S. McDonnell Distinguished University Professor at Princeton University, was the 2018 Dreyfus Lecturer. MacMillan’s research is centered on the field of organic synthesis and catalysis. He gave two lectures at Basel: The Impact of Catalysis on Society and New Photoredox Reactions.

Dreyfus Web Site & Video Library Redesigned

The Dreyfus Foundation Web site has been redesigned to spotlight the Foundation’s library of over 100 chemistry videos produced by Dreyfus awardees and other leaders in the field. These videos, organized by topical category, include:

- 79 short (~3 min) videos produced by recent Dreyfus Teacher-Scholars, where they present the potential importance of their research for a general audience
- 36 in-depth technical talks by distinguished chemists at Dreyfus symposia
- 5 Dreyfus Prize ceremonies and award addresses

News of the Board and Advisors

Mary Eileen Dowling Walter was elected to the Board of Directors at the 2018 annual meeting. Ms. Walter also has served on the Boards of the Rochester General Hospital Association, Rochester General Hospital, the Rochester Garden Club, and McCurdy and Company, Inc. She was a Vice President at B. Foreman Company and holds a BA in Economics from Newton College (now part of Boston College).

John Rogers, the Louis Simpson and Kimberly Querrey Professor of Materials Science and Engineering, Biomedical Engineering, and Neurological Surgery at Northwestern University and a Dreyfus Advisor, was named winner of the 2019 Franklin Medal in Materials Engineering. Rogers was cited “for pioneering the engineering of flexible and stretchable electronic systems for e-health and exploratory neuroscience.”
The mission of the Camille and Henry Dreyfus Foundation is to advance the science of chemistry, chemical engineering, and related sciences as a means of improving human relations and circumstances throughout the world. Established in 1946 by chemist, inventor, and businessman Camille Dreyfus as a memorial to his brother Henry, the Foundation became a memorial to both men when Camille Dreyfus died in 1956. Throughout its history the Foundation has sought to take the lead in identifying and addressing needs and opportunities in the chemical sciences.
2018 Awards

Camille Dreyfus Teacher-Scholar Awards Program
Alexander B. Barnes, Washington University in St. Louis
Amie K. Boal, The Pennsylvania State University
Abhishek Chatterjee, Boston College
Irene A. Chen, University of California, Santa Barbara
Francesco A. Evangelista, Emory University
Danna Freedman, Northwestern University
Catherine L. Grimes, University of Delaware
John B. Matson, Virginia Polytechnic and State University
Kang-Kuen Ni, Harvard University
Corinna S. Schindler, University of Michigan
Mohammad R. Seyedsayamdost, Princeton University
Mikhail G. Shapiro, California Institute of Technology
Matthew D. Shoulders, Massachusetts Institute of Technology

Jean Dreyfus Lectureship for Undergraduate Institutions
California State University San Marcos
Mercer University
Montclair State University
Southern Illinois University Edwardsville
State University of New York at Geneseo

Dreyfus-Sponsored Awards

ACS Award for Encouraging Women into Careers in the Chemical Sciences
Rebecca T. Ruck, Merck & Co., Inc.

ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences
Jani C. Ingram, Northern Arizona University

Henry Dreyfus Teacher-Scholar Awards Program
Nathan Bowling, University of Wisconsin-Stevens Point
Justin K. Hines, Lafayette College
R. Jeremy Johnson, Butler University
Jefferson Knight, University of Colorado Denver
Greg Springsteen, Furman University
Korin E. Wheeler, Santa Clara University
Nathan Wright, James Madison University
Kristin L. Wustholz, The College of William & Mary

The Camille & Henry Dreyfus Foundation
The Dreyfus Prize in the Chemical Sciences, awarded biennially, consists of a monetary award of $250,000, a medal, and a certificate. The prize, which is open to international nominations, is awarded to an individual in a selected area of chemistry to recognize exceptional and original research that has advanced the field in a major way. The 2019 Dreyfus Prize topic is Chemistry in Support of Human Health. 

**Deadline:** February 28, 2019

The Camille Dreyfus Teacher-Scholar Awards Program supports the research and teaching careers of talented young faculty in the chemical sciences at Ph.D.-granting institutions. Based on institutional nominations, the program provides discretionary funding to faculty prior to their sixth year of appointment. Criteria for selection include an independent body of scholarship attained as independent researchers and a demonstrated commitment to education. The award provides an unrestricted research grant of $100,000. 

**Deadline:** February 7, 2019

The Henry Dreyfus Teacher-Scholar Awards Program supports the research and teaching careers of talented young faculty in the chemical sciences at primarily undergraduate institutions. Based on institutional nominations, the program provides discretionary funding to faculty who are within the fourth and twelfth years of their independent academic careers. The award is based on accomplishment in scholarly research with undergraduates, as well as a compelling commitment to teaching. The award provides an unrestricted research grant of $75,000. 

**Deadline:** May 16, 2019

The Jean Dreyfus Lectureship for Undergraduate Institutions provides an $18,500 grant to bring a leading researcher to a primarily undergraduate institution to give a series of lectures in the chemical sciences, at least one of which is promoted and accessible to the general public. The lecturer is expected to substantially interact with undergraduate students and faculty over the period of the visit. The program provides funds to host the speaker and to support summer research opportunities for two undergraduate students.

**Deadline:** May 16, 2019

The Camille and Henry Dreyfus Foundation sponsors the American Chemical Society awards for Encouraging Disadvantaged Students into Careers in the Chemical Sciences and for Encouraging Women into Careers in the Chemical Sciences. The awards recognize significant accomplishments by individuals in stimulating these students to chose careers in the chemical sciences and engineering. Each award consists of $5,000, a certificate, and a grant of $10,000 to an eligible non-profit institution, designated by the recipient, to strengthen its activities in meeting the objectives of the award. See the American Chemical Society’s website for additional information on these awards: http://www.acs.org

**Deadlines for both awards:** November 1, 2019