



GRUBER

F O U N D A T I O N



FY 2013 Annual Report

July 1, 2012 – June 30, 2013

A supporting organization of **Yale**

A. Sarah Hreha, Executive Director
The Gruber Foundation
December 7, 2013
sarah.hreha@gruber.yale.edu

Executive Summary

The Gruber Foundation honors individuals in the fields of Cosmology, Genetics, Neuroscience, Justice, and Women's Rights, whose groundbreaking work provides new models that inspire and enable fundamental shifts in knowledge and culture.

The Gruber Foundation is a 509(a)(3) Type 1 supporting organization operated, supervised, or controlled by Yale University and incorporated in 2011 under the 501(c)(3) section of U.S. Corporate Law. It was funded by The Peter and Patricia Gruber Foundation, and Peter and Patricia Gruber serve as its Co-founders, and Chairman Emeritus and President Emeritus, respectively.

We continue to establish the Foundation at Yale, and Gruber staff and Board members have participated in myriad University events over the course of the year. It is a true pleasure to become part of this community!

The 2012 Gruber International Prizes were awarded in Beijing, San Francisco and New Orleans; the Gruber Program for Global Justice and Women's Rights hosted Justice Ruth Bader Ginsburg, among other events, and the Gruber Science Fellowship Program administered by Yale's Graduate School provided support to another cohort of promising students. The three programs are described in their respective sections.

The Board of Directors of The Gruber Foundation comprises: Rick Levin, Chairman; Peter Salovey, President; Patricia Gruber, President Emeritus; Joan O'Neill; Waring Partridge. The Treasurer is Robert Herr, and the Executive Director is A. Sarah Hreha.



A. Sarah Hreha, Executive Director

Further information on the Foundation is available online at gruber.yale.edu

Contents

Executive Summary	1
Contents	2
Financial Overview	3
International Prize Program	4
Program for Global Justice and Women’s Rights	6
Science Fellowship Program.....	8

Fiscal Year 2013 Financial Overview

Statement of Financial Position as of June 30, 2013

Assets

Cash and cash equivalents	\$ 57,015
Investments	83,204,932
Beneficial interest in charitable gift annuity	<u>15,311,233</u>
Total assets	<u>98,573,180</u>

Liabilities

Accounts payable	<u>9,016</u>
Total liabilities	<u>9,016</u>

Net assets	<u>\$98,564,164</u>
-------------------	---------------------

PROGRAM SPENDING

Grants to Yale University

The Gruber Foundation provides grants to Yale University for the Gruber Science Fellowship Program and the Gruber Program for Global Justice and Women's Rights. The agreement provides that The Gruber Foundation will distribute for the benefit of the Gruber Science Fellowship Program the greater of \$2.5 million or 1.6% of the net value of The Gruber Foundation's assets as of the beginning of each fiscal year. In addition the agreement provides for disbursements of \$1.2 million for the benefit of the Global justice and Women's Rights Program.

In the initial year of The Gruber Foundation 75% of the proposed funding has been distributed to these programs:

Gruber Science Fellowship Program	\$2,500,000
Gruber Justice and Women's Rights	<u>\$1,200,000</u>
	\$3,700,000

Gruber Prizes

Gruber Prizes disbursed through June 30, 2013 were as follows:

2012 Cosmology Prize	\$500,000
2012 Genetics Prize	\$500,000
2012 Neuroscience Prize	\$500,000
2013 Genetics Prize	<u>\$500,000</u>
	\$2,000,000

Gruber International Prize Program

Fiscal year 2013 saw the 2012 Gruber Prize awards in the fall of 2012. The program mission statement is: *The International Prize Program honors individuals in the fields of Cosmology, Genetics, and Neuroscience, whose groundbreaking work provides new models that inspire and enable fundamental shifts in knowledge and culture.*

The 2012 Prizes



COSMOLOGY

August 21, 2012

China National Convention Center

Beijing, China

Gruber Lecture: *From Ancient Light to Modern Cosmology: The WMAP Mission*

2012 Cosmology Prize recipient Charles Bennett with Sarah Hreha and Wendy Freedman.

Prize Citation:

The Gruber Foundation proudly presents the **2012 Cosmology Prize to Charles Bennett and the Wilkinson Microwave Anisotropy Probe team** for their exquisite measurements of anisotropies in the relic radiation from the Big Bang--the Cosmic Microwave Background. These measurements have helped to secure rigorous constraints on the origin, content, age, and geometry of the Universe, transforming our current paradigm of structure formation from appealing scenario into precise science.

Selection Advisory Board: Andrew Fabian, Wendy Laurel Freedman (Chair), Owen Gingerich (non-voting), Gerhard Huisken, Helge Kragh, Andrei Linde, Julio Navarro, Sadanori Okamura, Martin Rees (non-voting)

GENETICS

November 9, 2012

62nd Annual Meeting of the American Society of Human Genetics,
San Francisco, CA

Lecture: *A Bioenergetic Perspective on Origins, Health and Disease*



2012 Genetics Prize recipient Douglas Wallace flanked by Patricia Gruber and Mary-Claire King.

Prize Citation:

The Gruber Foundation proudly presents the **2012 Genetics Prize to Douglas Wallace** for the discovery of mutations in the mitochondrial genome and their impact on human health.

Wallace transformed mitochondrial genetics by demonstrating maternal inheritance of mitochondrial DNA (mtDNA) in humans and using it to discover that mutations in mtDNA cause an inherited human disease, Leber

Hereditary Optic Neuropathy. He went on to discover that mutations in the mitochondrial genome can cause a variety of clinical problems. By transferring mitochondrial DNA without nuclear DNA to cells and introducing mtDNA mutations into the mouse female germline, he advanced the study of mitochondrial DNA and demonstrated that the number of abnormal mitochondria underlies the variability in disease severity. Beyond inherited disorders, the discovery that mtDNA variation is maternally inherited helped trace the origins and migrations of indigenous women.

The key role of mtDNA in neuronal health continues to unfold, building on Wallace's observations that mtDNA mutations accumulate in postmitotic cells. Wallace's work continues to inspire studies on the key role of mitochondria in a variety of common age-related neurodegenerative disorders.

Selection Advisory Board: Elizabeth Blackburn (Chair), Martin Chalfie, Richard Lifton, Maynard Olson, Janet Rowley, Allan Spradling, Huda Zoghbi



2012 Neuroscience Prize recipients Lily Jan and Yuh Nung Jan (3 and 4 from left) with Carol Barnes, Patricia Gruber, and Moses Chao.

NEUROSCIENCE

October 14, 2012

42nd Annual Meeting of the Society for Neuroscience, New Orleans, LA.

Gruber Lecture: *In search of molecular underpinnings of neuronal morphologies and function: from Drosophila neurogenetics to evolutionarily conserved machineries in mammals*

Prize Citation:

The Gruber Foundation proudly presents the **2012 Neuroscience Prize** to **Lily and Yuh Nung Jan** for their fundamental contributions to our understanding of both voltage-gated ion channels and neural development.

Working together, the Jans discovered that potassium channels were responsible for a distinctive behavioral phenotype and they were subsequently successful in cloning and extensively characterizing core members of three different ion channel families. In parallel investigations, they also made seminal discoveries regarding the development of neurons and glia, including key features of cell fate specification, asymmetric cell division and dendritic maturation.

The remarkable and continuing advances by the Jans have provided key insights into the development and function of the nervous system, and have inspired and guided both trainees and other investigators to pursue two important areas of research.

Selection Advisory Board: Carol Barnes (Chair), Ben Barres, Stephen Heinemann, David Lewis, Erwin Neher, Leslie Ungerleider, Robert Wurtz

More information on the 2012 Gruber Prizes is available at: <http://gruber.yale.edu/gruber-prizes>

Gruber Program for Global Justice and Women's Rights

The Gruber Program for Global Justice and Women's Rights has three core components: 1) the Global Constitutionalism Seminar; 2) the Gruber Distinguished Global Justice and Women's Rights Lectures; and 3) the Gruber Global Justice and Women's Rights Fellowships.

Global Constitutionalism Seminar

The Global Constitutionalism Seminar took place August 29-September 1, 2012, in The Hague, with the theme "Law's Borders." The Law School and the Gruber Program for Global Justice and Women's Rights joined with the Carnegie Corporation of New York and The Peace Palace for this special convening that marked the Centennial of the Carnegie Corporation of New York and of The Peace Palace, in celebration of Andrew Carnegie's vision for international justice. Twenty-four judges from 19 national or transnational jurisdictions participated in the seminar's roundtable format. One highlight was a timely presentation on "Europe's Challenges" by José Manuel Barroso, President of the European Commission. Participants also visited and met with the Presidents and prosecutors from the International Criminal Court and the International Criminal Tribunal for the Former Yugoslavia.

Gruber Distinguished Lectures in Global Justice and Women's Rights

The Gruber Distinguished Lecture Series enjoyed a successful launch with "Equality's Frontiers," the inaugural Women's Rights Lecture given by Justice Ruth Bader Ginsburg. During her visit, Justice Ginsburg participated in a range of activities with students and faculty from across the University.

The inaugural Gruber Distinguished Lecturer in Global Justice, Luis Moreno Ocampo, first Chief Prosecutor of the International Criminal Court, visited New Haven in January 2013, and participated in a range of activities with Yale faculty and students, including his formal lecture, entitled "The Office of the Chief Prosecutor: The Challenges of the Inaugural Years."

Gruber Global Justice and Women's Rights Fellowships

Post-Graduate Fellowships

The second class of Gruber Fellows in Global Justice and Women's Rights will have completed their fellowship projects as of fall 2013.

Erin George (Yale School of Nursing '12) is working with Partners in Health in Haiti, collaborating with Haitian health care leaders to build capacity among Haitian nurses and midwives.

Amanda Gutierrez (Yale Law School '12) is based in Buenos Aires, Argentina, and is working with the Center for Justice and International Law to document labor practices in the textile industry and develop legal strategies for redressing exploitation of migrant workers.

Becca Heller (Yale Law School '10) will spend her fellowship year working with the Iraqi Refugee Assistance Project to develop legal interventions for Iraqi refugee women and girls who are being sexually trafficked.

Stephanie Keene (Yale Law School '12) is working with the International Justice Mission in Uganda, providing legal services to women and children who have been victims of illegal property seizure known as “land grabbing.”

Nichole Trumper (Yale School of Nursing '12) is based in Dominican Republic's Good Samaritan Mission Council, executing direct pediatric acute and preventative care, as well as developing protocols and training for more efficient evidence-based care.

The Gruber Committee received 24 applications for the 2013-2014 Gruber Fellowships from across the University, the Law School, School of Public Health, School of Nursing, Divinity, and the Jackson Institute for Global Affairs. The Committee selected six extremely impressive Fellows: **Glenda Aldana Madrid** (Yale Law School '13); **Andrew Iliff** (Yale Law School '12); **Marvin Lim** (Yale Law School '13); **Jeffrey Love** (Yale Law School '12); **Amelia Reese Masterson** (Yale School of Public Health '13); and **Zorka Milin** (Jackson Institute for Global Affairs '13).

Faculty Fellowships

Women's Faculty Forum (WFF)

The WFF held a colloquium at Yale Law School on April 26-27, examining “Contested Responses to Gender Inequalities,” with a particular focus on legal regimes, corporations and academia. Gruber Faculty Fellowship funding made possible the participation of a number of international participants.

Yale Global Health Leadership Initiative (GHLI)

GHLI – in collaboration with the Global Health Justice Partnership (GHJP) of Yale Law School and Yale School of Public Health— continues to develop its initiative focused on the mining industry in Southern Africa, particularly workers' compensation law and policy and the creation of a model clinic that integrates care for HIV, TB and occupational lung disease. In April 2013, GHLI/GHJP hosted Dr. Rodney Ehrlich of the University of Cape Town as a Gruber Fellow at Yale Law School and Yale School of Public Health. Gruber support has also made possible site visits to potential locations for the model clinic and a site assessment report is under development.

Jackson Institute for Global Affairs

The Jackson Institute hosted as a Gruber Fellow Professor Emma Sky, who focused her efforts on teaching and mentoring both graduate and undergraduate students. Her course titles include “International Politics of the Middle East” and “The New Iraq.”

Gruber Science Fellowship Program

The purpose of the Gruber Science Fellowship is to recruit and support the very best graduate students to pursue doctoral studies in the life sciences, cosmology and astrophysics at Yale's Graduate School of Arts and Sciences.



Graduate School Dean Thomas Pollard and A. Sarah Hreha pose with the 2012 cohort of Gruber Science Fellows at Yale.

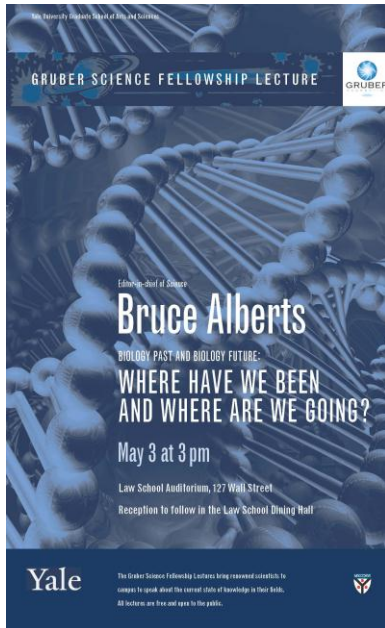
2012 Gruber science fellows:

Sarah Benjamin, Astronomy
Jeremy Bradford, Astronomy
Steven Braun, Biochemistry, Biophysics, and Structural Biology
Jiajia Cui, Biomedical Engineering
Ravi Dinesh, Immunology
Erin Duffy, Biochemistry, Biophysics, and Structural Biology
Asu Erden, Immunology
Emily Finn, Neuroscience
William Gray, Molecular Medicine, Pharmacology, and Physiology

Christian Harman, Molecular Cell Biology, Genetics, and Development
Colby Keistler, Neuroscience
Britta Kunkemoeller, Molecular Medicine, Pharmacology, and Physiology
Corey Martin, Immunology
Li Yan McCurdy, Neuroscience
Michael Parker, Immunology
Elizabeth Salm, Neuroscience
Ruijie Song, Computational Biology, and Bioinformatics

Rachel Stewart, Biochemistry, Biophysics, and Structural Biology
Brady Summers, Biochemistry, Biophysics, and Structural Biology
Francesca Tomaino, Microbiology
Aaron Wexler, Microbiology
Thomas Young, Molecular Cell Biology, Genetics, and Development
Chen Zhao, Biochemistry, Biophysics, and Structural Biology

Gruber Science Fellowship Lecture



Bruce Alberts, Editor-in-Chief of Science, Professor Emeritus at the University of California, San Francisco, a former president of the National Academy of Sciences and one of President Obama's first three Science Envoys to promote scientific and technological collaborations between the U.S and other countries, delivered the 2013 Gruber Science Fellowship Lecture on May 3.

Professor Albert's lecture was titled "**Biology Past and Biology Future: Where Have We Been and Where Are We Going**"
