

Watson School 2014 Ph.D.s



Philippe Batut

Université Paul Sabatier -
Toulouse III
Florence Gould Fellow

“Promoter evolution in *Drosophila*:
non-coding transcription
& transposon-driven innovation”

How “silent” areas of the genome
can have a dramatic impact on how
genes are expressed.



Dario Bressan

Università degli Studi di Pisa/
Scuola Normale Superiore
Goldberg-Lindsay Fellow

“A novel technology for the
space-specific recovery of
biological molecules”

Development of a laser-based
technology to discover how gene
expression varies at different
locations within a cell.



Mélanie Anne Eckersley-Maslin

University of Sydney
George A. and Marjorie H.
Anderson Fellow
Genentech Foundation Fellow

“Characteristics of random
monoallelic gene expression
during embryonic stem cell
differentiation”

A random feature of gene expression
illuminates a surprising variability
in how genes are used.



Michael Robert Pautler

University of Guelph
William R. Miller Fellow
NSERC Scholar

“Meristem size and determinacy
in maize”

How stem cell activity in plants
can be exploited to increase food
production.



Zinaida Aleksandrovna Perova

Saint-Petersburg State
Polytechnical University
Charles A. Dana Fellow

“Synaptic changes in the medial
prefrontal cortex in susceptibility
and resilience to stress”

How changes in neurons may
underlie the behavior known as
learned helplessness, a major
symptom of depression.



Yevgeniy Playskin

Cornell University
Alfred D. Hershey Fellow

“Regulation of the auxin
response by an ancient small
RNA pathway”

How a small RNA pathway
regulates the evolution of
developmental programs in plants.



Marek Kudla

University of Warsaw
George A. and Marjorie H.
Anderson Fellow

“Quantitative description of micro-
RNA target site occupancy in
mouse embryonic stem cells and
derived cells of neuronal lineage”

Novel applications of sequencing
technology to understand how
small RNA pathways control gene
expression in stem cells.



Katie Lynn Liberatore

The University of New Mexico
National Science Foundation
Graduate Research Fellow
Starr Centennial Fellow

“Investigating the roles of gene
dosage and stem cell maintenance
in the regulation of plant shoot
and inflorescence architecture”

The genetic basis of the development
of specialized reproductive branches
that control fruit production.



Hassana Oyibo

Stony Brook University
Farish-Gerry Fellow
William Randolph Hearst
Foundation Scholar

“A high throughput sequencing
approach to mapping synaptic
connectivity in the brain”

A new approach that uses DNA
sequencing to map all of the neuronal
connections in the mouse brain.



Joshua I. Sanders

Stony Brook University
Farish-Gerry Fellow

“A computational framework for
understanding decision confidence”

Determining the neural basis of
decision making among the vast
array of electrical signals in the
animal brain.



Kaja Alicja Wasik

University of Warsaw
George A. and Marjorie H.
Anderson Fellow

“Unusual aspects of piRNA
pathways in mice and flatworms”

Discovery of a protein that controls
a small RNA pathway in reproduc-
tive cells to protect the genome from
damage during the development of
eggs and sperm.



Richard R. Burgess, Ph.D., James D. Watson
Professor Emeritus of Oncology at the University
of Wisconsin, received an honorary degree. An
important figure in cancer, microbial and mo-
lecular research worldwide, Dr. Burgess has fo-
cused on RNA polymerase and the regulation of
transcription. He has been the heart of the CSHL
Course titled “Protein Purification & Character-
ization” since 1992. Dr. Burgess earned his Ph.D.
at Harvard University under the tutelage of
Dr. Watson.

B.S., 1964
Chemistry,
California
Institute of
Technology

Ph.D., 1969
Biochemistry
& Molecular
Biology,
Harvard
University