Genetics Society of America Announces 2012 Award Recipients

Bethesda, MD (January 18, 2012) -- The Genetics Society of America (GSA) is pleased to announce the 2012 recipients of its five awards for distinguished service in the field of genetics. The recipients of these awards were nominated and selected by their colleagues.

GSA President Philip Hieter, PhD, said, “the individuals honored this year exemplify the seminal contributions that genetics makes to our fundamental understanding of living systems, helping point the way toward such applications as developing new treatments for human disease and increasing the yields of agricultural crops. We are delighted to honor these geneticists who have added so much not only to our field, but to society as a whole.”

The recipients are:

- **Kathryn V. Anderson**, PhD (Memorial Sloan-Kettering Cancer Center) has received the **Thomas Hunt Morgan Medal** for lifetime contributions to the field of genetics.

- **Joanne Chory**, PhD (Salk Institute for Biological Studies) has received the **Genetics Society of America Medal** for outstanding contributions in genetics for the last 15 years.

- **Therese Markow**, PhD (University of California, San Diego) has received the **George W. Beadle Award** for outstanding contributions to the community of genetics researchers.

- **David A. Micklos** (Cold Spring Harbor Laboratory) has received the **Elizabeth W. Jones Award for Excellence in Education** which recognizes significant and sustained impact in genetics education.

- **Dana Carroll**, PhD (University of Utah) has received the **Edward Novitski Prize**, which recognizes an extraordinary level of creativity and intellectual ingenuity in solving a significant problem(s) in genetics research.

These five researchers and educators have a broad range of research and professional interests, many of which involve the use of model organisms—such as mice, plants, and Drosophila (fruit flies)—which enable scientists to enhance our understanding of the natural world in experimentally tractable systems. More information about the recipients and their awards are listed below:
Recipient: Kathryn V. Anderson, PhD, Memorial Sloan-Kettering Cancer Center

Dr. Anderson is a developmental biologist who has spent decades discovering the genes and proteins that interact during embryonic development to control embryonic patterning in both Drosophila and mice. Her work with genetic screening has led to seminal discoveries including genes controlling developmental patterns of the Drosophila nervous system, the immune system response in fruit flies, and the early development of mammalian embryos.

Dr. Anderson holds the Enid A. Haupt Chair in Developmental Biology and is the founding chair of the Developmental Biology Program at the Sloan-Kettering Institute. She is an elected member of the National Academy of Sciences and the Institute of Medicine.

Award: The Thomas Hunt Morgan Medal is named in honor of the classical geneticist who was among those researchers who laid the foundation for modern genetics. Morgan received the 1933 Nobel Prize in Physiology or Medicine for his studies of Drosophila chromosomes and the role chromosomes play in heredity.

Recipient: Therese Markow, PhD, University of California, San Diego

Dr. Markow is a professor of evolutionary biology and ecology, studying speciation, the evolution of mating systems, and adaptation to novel environments. Her research on cactus-breeding Drosophila in the Sonoran Desert has broad implications for the field of population genetics, particularly the genetic and ecological factors driving reproductive isolation, which eventually leads to the development of distinct species.

In addition to research in her own lab, Dr. Markow is director of the Drosophila Species Stock Center, a living collection of more than 1,600 strains and 250 species of Drosophila supported by the National Science Foundation. This center is an invaluable resource for genetics researchers worldwide who use Drosophila to answer fundamental questions in evolution, ecology, developmental biology, physiology, neurobiology, comparative genomics, and genomics.

Dr. Markow holds the Amylin Chair in Life Sciences at the University of California, San Diego. She was named a Fellow of the American Association for the Advancement of Science in 2008 and received a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring in 2001.

Award: The George W. Beadle Award was established by GSA in 1999 and named for its past president (1946), who received the 1958 Nobel Prize in Physiology or Medicine for his discovery of the role of genes in regulating biochemical events within cells. In addition to his pioneering genetics research, Beadle was a leader in the educational and scientific communities, serving as president of the University of Chicago (1961–1968) and as a member of numerous influential national committees.
Recipient: Joanne Chory, PhD, Salk Institute for Biological Studies
A long-time member of GSA, Dr. Chory is a leading molecular and cellular plant biologist, using genetic approaches in Arabidopsis thaliana to elucidate the molecular mechanisms underlying plant development. Dr. Chory’s research helps understand how plants detect and respond to changes in their environment, particularly light, which has implications for the growth and development of agricultural crops in challenging environments.

Dr. Chory holds the Howard H. and Maryam R. Newman Chair in Plant Biology at the Salk Institute for Biological Studies, where she is professor and director of the Plant Molecular and Cellular Biology Laboratory and an investigator with the Howard Hughes Medical Institute (HHMI). She is a member of the National Academy of Sciences and a foreign member of The Royal Society, German National Academy of Sciences, and French Académie des Sciences.

Award: The Genetics Society of America Medal was established by GSA in 1981 to recognize mid-career researchers for outstanding contributions to the field of genetics during the previous 15 years of their careers.

Recipient: David A. Micklos, Cold Spring Harbor Laboratory
Mr. Micklos, a science educator and writer, founded the DNA Learning Center (DNALC) at Cold Spring Harbor Laboratory (CSHL) in 1987 as the nation’s first science center solely devoted to public education in genetics. Through this center, Mr. Micklos has brought the excitement of DNA science into the educational curriculum for thousands of students, high school teachers, and undergraduate faculty. With his books and the DNALC website, he has brought genetics and genomics resources to students and teachers nationwide and is helping to develop an educated citizenry in genetics.

Mr. Micklos is executive director of the DNALC, arriving at CSHL in 1982 to start the laboratory’s public affairs and development efforts. He is lead author of DNA Science: A First Course, a highly successful textbook for the secondary and post-secondary market now in its second edition. Mr. Micklos received the 1990 Charles A. Dana Award for Pioneering Achievement in Education.

Award: The Elizabeth W. Jones Award for Excellence in Education was established in 2006 as the GSA Excellence in Education Award, but was renamed for its first recipient after her death in 2008. The award honors Jones, who during her decades-long tenure at Carnegie Mellon was director of the HHMI Undergraduate Biological Science Program and a mentor to many in the field of genetics.
Recipient: Dana Carroll, PhD, University of Utah

Dr. Carroll was the first to adapt an enzyme (specifically, zinc finger nucleases) to generate targeted chromosomal breaks at specific locations in a DNA sequence, utilizing the natural cellular DNA repair mechanisms to introduce new genetic material in that region. This technology allows researchers to introduce engineered changes in genes of interest into living experimental organisms for the first time. This method of targeted mutagenesis and gene replacement is currently being used in a wide array of eukaryotes, and applications of this technology range from elucidating gene function to correcting genetic diseases in humans.

Dr. Carroll is professor of biochemistry at the University of Utah, where he has spent his entire faculty career.

Award: The Edward Novitski Prize was established in 2007 by the family of Drosophila geneticist Edward Novitski (1918–2006). The prize honors geneticists who tackle difficult problems using innovative experimental approaches, just as Novitski did in his research on chromosome mechanics.

For more information about each award and for a list of past recipients, please visit the GSA Awards page at http://www.genetics-gsa.org/pages/awards.shtml.

ABOUT THE GENETICS SOCIETY OF AMERICA

Founded in 1931, the Genetics Society of America (GSA) is the professional scientific society for genetics researchers and educators. Its nearly 5,000 members work to advance knowledge in the basic mechanisms of inheritance, from the molecular to the population level. GSA promotes research and fosters communication among geneticists worldwide through a number of GSA-sponsored conferences including the biennial conference on Model Organisms to Human Biology, an interdisciplinary meeting on current and cutting edge topics in genetics research, and annual and biennial meetings that focus on the genetics of particular model organisms. GSA publishes GENETICS, the leading journal for seminal research in the field and a new, online publication, G3: Genes/Genomes/Genetics, which publishes high quality foundational research, particularly research that generates useful genetic and genomic information. For more information about GSA, please visit www.genetics-gsa.org. Also follow GSA on Facebook at facebook.com/GeneticsGSA and on Twitter @GeneticsGSA.

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