

SANTA BARBARA CITY COLLEGE

35th Annual Faculty Lecture

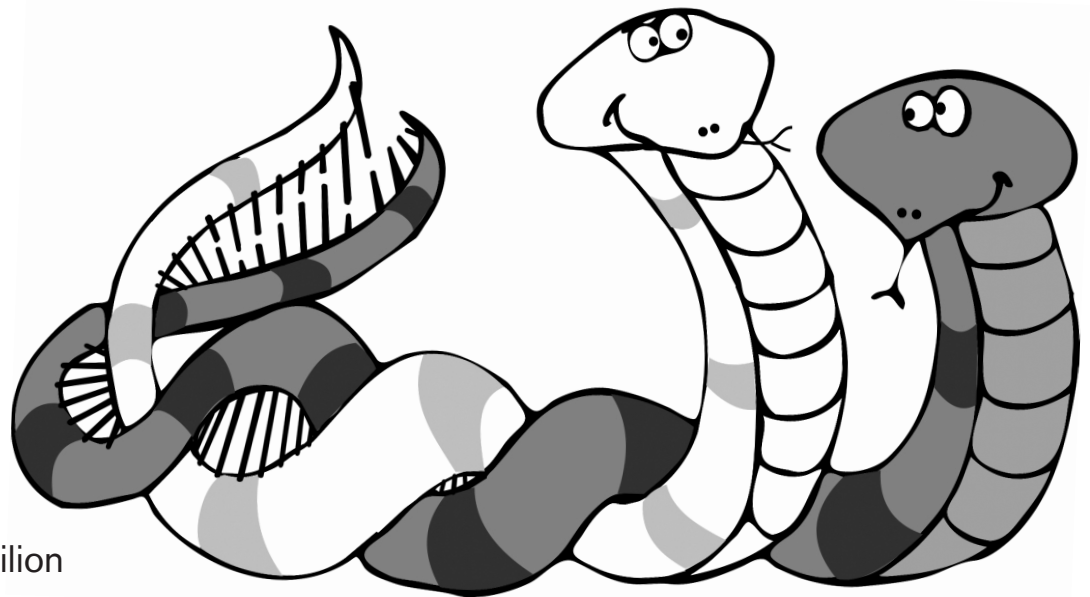
Selected
by his peers,

Mr. Blake Barron presents



Sex, Drugs and Rock & Roll:

♫ SENSATIONS & RHYTHMS OF LIFE



**SB
CC**

SANTA BARBARA
CITY COLLEGE Sports Pavilion

March 12, 2014 at 2:30p.m.

Come Early: Interactive Biology Exhibits start at 1:30p.m.

SANTA BARBARA CITY COLLEGE

ANNUAL FACULTY LECTURES

This is the 35th in a series of lectures wherein a distinguished Santa Barbara City College faculty member is chosen by colleagues to deliver an address on a scholarly subject of general interest. Outstanding classroom teaching, counseling, or librarianship; unselfish, dedicated faculty service to Santa Barbara City College, is the criteria for selection.

ABOUT THE LECTURE

The sensational array of life on Earth is awe-inspiring, astoundingly diverse and rhythmic. There is beauty, and some comfort, in the genetic continuity between all the species that have ever existed with the organisms that surround us today, as well as those yet to evolve. Several times in Earth's history, catastrophic events have forced most species to extinction. Yet- since the beginning, some form of life has always found a way to survive and give rise to new species. How is the continuum of life maintained? The study of living things- biology, addresses this and is a field broad in scope and encompasses realms from the very small (molecules) to the very large (ecosystems).

The lecture begins with a review of the importance of sex. Genes provide the blueprints for the incredible adaptations seen in creatures from the tiniest microorganisms to the most massive of beasts. The passing of these genes from one generation to the next is key to the common connection between all life forms. Sexual reproduction is at the heart of this evolution. Sex not only allows a species to propagate but provides a mechanism for the mixing of genes that is foundational to the long-term survival of any species. Genes code for proteins which are the workhorse molecules in cells, and are the primary determinants of the diverse adaptations that animals possess.

Because proteins have such a strong influence on cell conditions, they are often the targets of drugs. Drugs are specific molecules with precise effects. Our modern understanding of life is based on studies of the vast assortment of the molecules that comprise cells. The drugs that people take both clinically and recreationally are simply examples or variants of certain biologically active molecules. Our current ability to manipulate these molecules and cellular pathways is already extraordinary and will only continue to expand in the future. It is amazing how just the right combination of molecules form an animal's different tissues and organs.

The lecture ends with a discussion of why so many people enjoy music such as the genre of rock and roll. The ability to effectively sense their environment is paramount to the survival of any animal and they are moved by the vibrations around them. Be it the waves of reflected light that allow a falcon to successfully hunt its prey to the thrashing guitar riffs of a great rock and roll song, an animal's senses help it "understand" the world. Human senses were the first scientific instruments and careful observation is crucial to effective science. As humans, our highly intellectualized brains allow us to perceive and feel the natural world in unique ways. The development of Science is a natural evolution of this integrated perception. Such thoughtful scrutiny demonstrates that despite all the diversity of life's molecules and species, there are patterns and rhythms in the natural world—we are all connected.

DEDICATION

I dedicate this lecture to my wife and my students—past, present and future.

I am most thankful for my amazing wife Janet! She is the beautiful jewel who is my partner in this journey of life through our greatest trials to the many rewards for which we are daily grateful. Without her dedication as a working professional herself, very patient wife and mother to my two lively and creative sons, I would not have the opportunity to grow professionally and dedicate so much time to my students and the art of teaching. Thank you Janie!

I also dedicate this lecture to all of our students—you rock! As I tell my students every semester, I hope they have the same opportunity I have—the best job for me in the entire world! My life is greatly enriched because of teaching. It is what I was meant to do and I love coming to work at SBCC with all the rewards and challenges each day brings.

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ABOUT THE LECTURER



Blakely (Blake) Barron was raised, along with his taller “little” brother Matt, by his loving and devoted parents, Paul and Neva Barron in Ventura County. It was from watching his parents work so hard that Blake learned his work ethic. While he was born in Fort Sill, Oklahoma (in an army hospital as his father was returning from Vietnam) he grew up entirely in Southern California. Fond thoughts of explorations and an innate curiosity for the outdoors dominate Blake’s childhood memories. Hiking, camping, swimming and reading were and still are among his favorite activities. He has always been a voracious reader and not surprisingly was drawn into the worlds of science fiction, fantasy and Dungeons and Dragons. As a self-described science geek, he was excited when his parents got him one of the earliest home computers, a TI-99/4A, with a whopping 16KB of memory! A fascination with technology, data collection and analysis was born.

He is a proud graduate of the public education system in California, which he attended from elementary school to the University of California, Santa Barbara. Some of his abilities as an instructor today come from this early exposure to innovative teaching by committed science teachers. He has always been attracted by the sea and after graduating from Moorpark High School in 1986 he washed up on the beaches near UC Santa Barbara. Blake earned a Bachelor of Arts in Physiology and Cell Biology from UCSB in 1991.

In graduate school at UCSB, Blake’s research was focused on various aspects of reproductive physiology in fish. Blake accepted the opportunity to not only be a Teaching Assistant for three different biology courses at UCSB but also to lecture one semester for an upper division vertebrate reproduction course. These rich experiences kindled a fiery interest in teaching. Blake earned his Master of Arts in Biological Science with an emphasis in Comparative Physiology in 1996 and he knew that, while research was indeed fascinating, a career focused on teaching was his desired goal. Blake reflects on this period as one of the luckiest times in his life. As one of his last T.A. positions at UCSB was ending, Blake was exceedingly fortunate to be hired as an adjunct faculty member by the Department of Biological Sciences at Santa Barbara City College in 1996. Between 1998 and 1999, Blake married his lovely wife Janet, purchased his first new car and was hired as a full-time, tenure-track professor at SBCC.

The past 17 years at SBCC have been tremendously fulfilling for Blake. There is a true sense of community at SBCC. With wonderful mentors in his department and around campus, Blake has learned to be the best teacher he can while simultaneously experiencing great personal growth. Much of his professional development comes from the opportunities Blake had teaching a range of 14 different majors and non-majors courses in the Biological Sciences Department. This diversity has provided Blake with a breadth of knowledge that he can continually integrate and share with students.

Blake enjoys being involved in multiple aspects of our campus culture. After briefly serving on the Honors Advisory and Student Services Committees, Blake jumped in the deep end of the committee assignment pool. He had the privilege of doing the important and sometimes difficult work performed by the Faculty Academic Senate from 2004 to 2007. Blake has been both Biomedical Sciences Coordinator and Biology 100 Coordinator and is member of the One Planet faculty. He currently serves as Department Chair for Biological Sciences and has previously served as co-chair. The STEM (Science, Technology, Engineering and Mathematics) Transfer Program Faculty Workgroup is one of his favorite current committees as they develop strategies and pedagogy to facilitate student success in STEM courses. In 2011-12 Blake was honored to earn a SBCC Faculty Excellence Award.

Santa Barbara City College is #1 in the nation (2013, The Aspen Institute Prize for Community College Excellence) because our students are the focus. Blake was very proud to serve as the lead coordinator to write and guide the A.A. in Liberal Arts: Biomedical Sciences Emphasis degree through the campus- and state approval processes. Blake is most proud to be the Faculty Advisor for the Biology Club since Fall 2008. The level of dedication to service and exploration exemplified by the devoted student members of the SBCC Biology Club is impressive.

Blake’s teaching philosophy is characterized by high expectations for both himself and his students tempered with compassionate consideration of the diversity of our students and recognition of both their fears and potential. As primates, humans are social critters. Our survival and ability to thrive is predicated on our establishing effective relationships and staying connected. Blake looks forward to many more years of adventure, discovery and fun at SBCC!

ACKNOWLEDGEMENTS

There are so many individuals with whom I share this honor. I have been so fortunate that the rhythm of my own life has been punctuated by relationships with remarkable people. Thanks to Janet for managing our lives so well as I have been glued to the computer the past few years and thanks to my energetic young sons Eli and Lucas, for their reluctant willingness to share Daddy so much recently. You bring me great hope and happiness everyday!

I speak for the entire SBCC faculty and staff when I say that we greatly appreciate our students. There are few pleasures greater than participating in the success of our students and watching them grow and transform into fulfilled citizens each in their own way. I am particularly grateful to the past and present members of the Biology Club, I admire you all. Thanks to all of the Biology students who are here today sharing their knowledge of nature.

This lecture could not have happened without my amazing family of students, staff and fellow faculty in the Department of Biological Sciences. My colleagues are the best mentors and I treasure our relationships. Collectively and individually, everyone in our department constantly works to up their game for the benefit of our students in and out of the classroom. I am very grateful to Dr. Larry Friesen for sharing some of his astonishing photographs and artwork, which so beautifully illustrate nature—this lecture would have been nearly impossible without them. The committed and innovative faculty and staff in the entire Sciences Division are a model for a truly collegial environment.

The culture on our campus is not just special—I feel it is unique. I acknowledge our supportive administration for their thoughtful and often inventive campus oversight. In particular, I must single out our Dean of Educational Programs for the Sciences Division Marilynn Spaventa for her personal support. She is a cherished friend and effective advocate for so many on the SBCC campus.

I am elated that my parents are able to be here today for without them I would not be the man I am today. Thank you to all of my family members and friends. This lecture, my individual growth and many of my capabilities as an instructor are a direct result of the wondrous love and attentive counsel that so many of you have shown me. It is a genuine gift that I have so many people in my life whom I admire, respect and love.

“An intellectual is a person who’s found one thing that’s more interesting than sex.” — Aldous Huxley

PREVIOUS FACULTY LECTURE HONOREES

Dr. Robert Casier	1979-80	Mr. David N. Lawyer, Jr.....	1996-97
Mr. Henry H. Bagish	1980-81	Mr. Joseph P. White	1997-98
Dr. Charles R. Courtney	1981-82	Dr. Manoutchehr Eskandari-Qajar	1998-99
Dr. Harold M. Dunn	1982-83	Dr. Jeannette Webber	1999-00
Dr. John Kay	1983-84	Dr. Peter Haslund	2000-01
Mr. Raymond O’Connor	1984-85	Ms. Genevieve B. Anderson	2001-02
Dr. Barbara S. Lindemann.....	1985-86	Mr. Carl W. Sundbeck.....	2002-03
Dr. Elwood Schapansky.....	1986-87	Dr. Janet Shapiro.....	2003-04
Dr. George E. Frakes	1987-88	Dr. Peter Georgakis	2004-05
Dr. Elizabeth Hodes	1988-89	Mr. James Cheshier	2005-06
Dr. Jack R. Ullom	1989-90	Dr. John Clark	2006-07
Dr. Curtis B. Solberg.....	1990-91	Mr. Don Barthelmess	2007-08
Ms. Diane Johnson Handloser	1991-92	Dr. Carolyn R. Hanna.....	2008-09
Dr. Robert J. Cummings	1992-93	Dr. Robert Gray	2009-10
Mr. John C. Egger	1993-94	Dr. Michael Young	2010-11
Mr. Michel Masson	1994-95	Ms. Kathleen O’Connor	2011-12
Dr. Gary L. Carroll	1995-96	Ms. Kathleen Molloy.....	2012-13