Fall 2018 Awards

**Biological Sciences Department**
Faculty Sponsor: Dianne Baker
Student: Rachel Summers - Embryonic development of the stress hormone axis in teleosts

Faculty Sponsor: Rosemary Barra
Student: Sara Fioretti – Combined Effects of Statins and Chemotherapeutic Agents on Cancer Cells

Faculty Sponsor: Lynn Lewis
Student: William Harrison – The Effects of Digoxin and Doxorubicin on a breast cancer cell line

Faculty Sponsor: Abby Tomba
Student: Anna Ruuskanen – Trematodes of Cyprinids

Faculty Sponsor: Deborah O’Dell
Student: Olivia Blake – Dopamine Receptor Expression on Worker Honey Bees in response to Queen Mandibular Pheromone

Faculty Sponsor: Parrish Waters
Student: Sarah Balenger - Behavioral acquisition and analysis techniques in bilaterally bulbectomized CD-1 mice
Student: Anna Rinko - Patterns of Wheel-Running in Bulbectomized Mice

Faculty Sponsor: April Wynn
Student: Emily Contompasis - The Effects of Environmental Conditions on Expression of the ETTIN Gene in Perianthia Mutant Arabidopsis Thaliana

**Chemistry Department**
Faculty Sponsor: Leanna Giancarlo
Student: Daniel Arango – Metal Content of VA Reservoirs

Faculty Sponsor: Davis Oldham
Student: Lindsey Jones – Synthesis of piperidine-based inhibitors of KasA, an essential enzyme in M. Tuberculosis

Faculty Sponsor: Randall Reif
Student: Catherine Zwemer – The Temporal Dynamics of the Extrinsic Process of Apoptosis

Faculty Sponsor: Kelli Slunt
Student: Catherine Zwemer - Investigating the Temporal Dynamics of the Intrinsic Process of Apoptosis

**Classics, Philosophy, & Religion Department**
Faculty Sponsor: Daniel Hirshberg
Student: Jarrett Ashby – Secularism in Nepal: Case Study on the Transition from Monarchy to Secular State
Earth & Environmental Science Department
Faculty Sponsor: Pam Grothe
Student: Kathleen Elliott - Isotope Hydrology: the seasonality of oxygen and hydrogen isotopes in meteoric, fluvial and groundwater
Student: Andrea Moore - Constraining the Mid-Holocene ENSO Minimum in the Central Pacific Using Geochemistry of a 5,000 year-old Porites Fossil Coral
Student: Cheyenne Palmo - Water Isotope Semantics: A survey of paired salinity and δ18O in Chesapeake Bay and its tributaries

Faculty Sponsor: Ben Kisila
Student: Grace Rihl - Sediment Accumulation and trace metal input in Lake Manassas and Lake Occoquan
Students: Grace Rihl, Daniel Argo, & David Jett - Sediment accumulation and trace metal input history in Lake Manassas and the Occoquan Reservoir
Student: Lauren Chartier - The Effects of Sand Mining on Crop Quality
Student: Thanh-Binh Duong - Assessment of Spatial and Temporal Distribution of Micro plastics in the Lower Chesapeake Bay Basin, USA

Geography Department
Faculty Sponsor: Dawn Bowen
Students: Darby Libka & Jordan Chandler - Memorialization of World War II on the National Mall

Faculty Sponsor: Jackie Gallagher
Student: Eli McCleary - Earthquake Preparedness in Children and Young Adults in Northern Virginia

Faculty Sponsor: Joe Nicholas
Students: - Team VA in the SEDAAG World Geography Bowl Competition

Faculty Sponsor: Melina Patterson
Students: Lilly Lester, Hannah Woehrle, Lindsey Minges, & Sarah Giuseppe - Exploring the Geographies of Children

Historic Preservation Department
Faculty Sponsor: Andrea Livi Smith
Student: Ilana Bleich - The First Competition: Environmental & Cultural Sustainability in the Olympics’ Built Environment

Faculty Sponsor: Lauren McMillan
Student: Elizabeth O’Meara - Wine Bottle Seals at Nomini Plantation Archaeological Site

Mathematics Department
Faculty Sponsor: Jeb Collins
Students: Makenzie Clower & Riley Anderson - Predicting Parameters for Bertini Using Neural Networks

Modern Languages and Literature Department
Faculty Sponsor: Maysoon Al-Sayed Ahmad
Students: Gail Crunkhorn, Mackenzie Poust, & Chase Lacy - Capital Area Regional Model Arab League Conference
Music Department
Faculty Sponsor: Michael Bratt
Students: Arthur Dragone & Samuel Bradshaw - Electro Acoustic Barn Dance

Psychological Science Department
Faculty Sponsor: Hilary Stebbins
Student: Megan Jacobs - Sleep deprivation, circadian rhythm, cortisol, and stress

Theatre and Dance Department
Faculty Sponsor: Gregg Stull
Student: Patrick Regal – All the Fine Boys
Students: Aaron Hoffman, Victoria Fortune, Erin Foster, & Madeline Petroskey – First Year Showcase Festival