Foreword, Washington University Undergraduate Research Digest (WUURD), Volume 8, No. 1, Fall 2012

Kristin G. Sobotka

Washington University in St Louis

WUURD, the Washington University Undergraduate Research Digest, is published by the Office of Undergraduate Research once a semester each academic year. Applications for submission and Statement of Editorial Policy may be found online.

Follow this and additional works at: http://openscholarship.wustl.edu/vol8_iss1

Recommended Citation

Sobotka, Kristin G., "Foreword, Washington University Undergraduate Research Digest (WUURD), Volume 8, No. 1, Fall 2012" (2012). Washington University Undergraduate Research Digest, Volume 8, Issue 1.

http://openscholarship.wustl.edu/vol8_iss1/182
The authors and peer review editors of the Fall 2012 Washington University Undergraduate Research Digest welcome you to this volume. As more undergraduates engage in research in a greater diversity of disciplines than ever, undergraduate research continues to grow in importance at the University. The work reported in this publication has been recognized as significant by faculty and their academic departments at Washington University as well as by academic and professional societies far beyond our walls.

The three articles featured in this edition of the WUURD represent the multifaceted interests of the authors and their faculty mentors at Washington University. Aaron Foot, a Physics major, explores the electrical signals passed through the visual cortex of turtles to better understand vision. Neurophysics sits at the interface between physics and biology and medicine and Aaron’s work employs the tools of physics including electronic signal analysis to investigate a physiological process. The data he has collected so far provides evidence of a strong correlation between action potential spikes and the local field potential spontaneously produced in the visual cortex. Researchers will now begin to analyze signals resulting from specific, controlled visual stimuli to further understand the nature of neural activity related to vision. Lauren Henley digs deeply into two institutions that housed young African-American girls deemed delinquent during the early twentieth-century. A student of History, Lauren was given access to records from each institution that is unprecedented for an undergraduate. She used this information to understand how the creation of and practices at each school served to prepare its inhabitants for the future. Lauren found that a single individual, Ms Janie Porter Barrett, overwhelmingly influenced many aspects of her “school” and the ultimate outcomes for its inmates as compared to those at the other institution. The work reported here was conducted when Lauren had only completed her freshmen year at Washington University and could lead to a possible film. Shelby Strong’s work brings together her academic interests in linguistics, Korean language and culture, and gender identity. She analyzes phrases uttered in aegyo, a very new form of expression in Korean pop-culture, for certain specific aspects of speech including pitch range and boundary tones. Initial findings indicate that phrases repeated in the aegyo style are measurably different in mean pitch than are the same phrases in non-aegyo style. This analysis of aegyo is one of a very few to be published in English and may be used to create a working definition of the very popular phenomena.
The Summaries of Student Work section is filled with reports from students exploring a rich diversity of disciplines. Mentored by faculty for whom each student has expressed sincere gratitude, the works will continue to place Washington University in St Louis in the forefront of national and international scholarship. Many of the summaries contained in the WUURD report work that has or will be disseminated to experts in the respective fields of study. Many students publish the results of their research in academic and professional journals and present it at conferences and meetings. This digest is evidence of the outstanding students and faculty who do their work at our university.

Finally, the authors and editor must recognize the contribution of the Peer Review Board. These individuals selected and edited the feature articles presented herein. The excellence and level of professionalism of the WUURD is due in large part to their work. On behalf of the authors as well as myself, I wish to express our sincere appreciation for a job very well done.

We welcome you to enjoy and become inspired!

Respectfully,

KRISTIN SOBOTKA
Editor