It's All About Relationships

In a recent issue of the CUR Quarterly, Washington Partners—a full-service, government-relations firm in Washington, D.C., that works with CUR to promote the interests of undergraduate research with legislators and other key policy leaders—discussed the importance of CUR members staying up to date on current developments in their states and on Capitol Hill. As a result, perhaps some of you have been reading the monthly Washington Updates that arrive in your email inbox and then generally staying abreast of happenings in Washington. “Knowledge is power” may sound trite, but indeed educating yourself is the first step to becoming an effective advocate for undergraduate research. And after knowledge comes the importance of developing helpful relationships.

President Lyndon B. Johnson said it best: “The time to make friends is before you need them.” That adage clearly applies to advocating for support from federal research programs. If you don’t feel that you have the time or access to make friends with your local Representative or your two Senators, no worries. It’s their staff who counsel lawmakers on policy issues, and thus establishing a solid relationship with those staff members—nurtured before any crisis—can sometimes be more helpful than a short meeting with the elected official. The first step in building such a relationship is scheduling a meeting in the lawmaker’s district office. Using the CUR Advocacy Toolkit, posted on CUR’s website under the Washington Partners - CUR’s Partner in Advocacy.

It’s All About Relationships

In a recent issue of the CUR Quarterly, Washington Partners—a full-service, government-relations firm in Washington, D.C., that works with CUR to promote the interests of undergraduate research with legislators and other key policy leaders—discussed the importance of CUR members staying up to date on current developments in their states and on Capitol Hill. As a result, perhaps some of you have been reading the monthly Washington Updates that arrive in your email inbox and then generally staying abreast of happenings in Washington. “Knowledge is power” may sound trite, but indeed educating yourself is the first step to becoming an effective advocate for undergraduate research. And after knowledge comes the importance of developing helpful relationships.

President Lyndon B. Johnson said it best: “The time to make friends is before you need them.” That adage clearly applies to advocating for support from federal research programs. If you don’t feel that you have the time or access to make friends with your local Representative or your two Senators, no worries. It’s their staff who counsel lawmakers on policy issues, and thus establishing a solid relationship with those staff members—nurtured before any crisis—can sometimes be more helpful than a short meeting with the elected official. The first step in building such a relationship is scheduling a meeting in the lawmaker’s district office. Using the CUR Advocacy Toolkit, posted on CUR’s website under the Washington Partners - CUR’s Partner in Advocacy.

It’s All About Relationships

In a recent issue of the CUR Quarterly, Washington Partners—a full-service, government-relations firm in Washington, D.C., that works with CUR to promote the interests of undergraduate research with legislators and other key policy leaders—discussed the importance of CUR members staying up to date on current developments in their states and on Capitol Hill. As a result, perhaps some of you have been reading the monthly Washington Updates that arrive in your email inbox and then generally staying abreast of happenings in Washington. “Knowledge is power” may sound trite, but indeed educating yourself is the first step to becoming an effective advocate for undergraduate research. And after knowledge comes the importance of developing helpful relationships.

President Lyndon B. Johnson said it best: “The time to make friends is before you need them.” That adage clearly applies to advocating for support from federal research programs. If you don’t feel that you have the time or access to make friends with your local Representative or your two Senators, no worries. It’s their staff who counsel lawmakers on policy issues, and thus establishing a solid relationship with those staff members—nurtured before any crisis—can sometimes be more helpful than a short meeting with the elected official. The first step in building such a relationship is scheduling a meeting in the lawmaker’s district office. Using the CUR Advocacy Toolkit, posted on CUR’s website under the Washington Partners - CUR’s Partner in Advocacy.

This paper highlights the limits of applying macro-level peace and reconciliation strategies to the Congolese situation and asserts that political, economic, and social cleavages at the local level continue to fuel national instability. The study draws on African experiences of transitional justice in Sierra Leone and Rwanda to offer specific lessons on how institutions at multiple levels of analysis can work together to foster peace and accountability. Lori Hartmann-Mahmud is the Hower associate professor of international studies. Brian Klosterboer is the primary author of this article. He conducted the research throughout the year 2011-12 for his senior thesis project with support from the John C. Young scholars program at Centre College. Brian is currently in Uganda on a Fulbright Research Grant, studying the relationship between the media and peace-building. The John C. Young program supports senior research for a small number of highly qualified students (usually 6-10 per year), of which Brian was one in 2011-12.


The present study was undertaken to gain insight into the associations of mercury(II) with dicysteinyl tripeptides. We investigated the effects of increasing the distance between cysteinyl residues on mercury(II) associations and complex formations. The results from this study show that the dicysteinyl tripeptides are effective in binding mercury(II) and they are promising motifs for the design of multi-cysteinyl peptides for binding more than one mercury(II) ion per peptide. Maria Ngu-Schwemlein is a professor of chemistry. Jeremy Brooks is currently working as a chemistry at Kelly Scientific Resources. Matthew Bronson is a graduating senior. This research was supported by the NSF RUI Grant CHE 1011859, and the NIH NIGMS SC3 Grant SC3GM088134. J.B. and M.B. acknowledge support from the NSF HBCU-Undergraduate Program.


This paper completely classifies the group of color preserving automorphisms for the graph of any finite group. These complete edge colored graphs, related to Cayley digraphs, generalize to algebraic structures besides groups. Tom Sibley is a professor of mathematics. David Byrne and Matt Donner did their research for their honors theses their senior year (2010-2011). David is in a doctoral program in mathematics at Bowling Green State University. After volunteering abroad, Matt is applying to doctoral programs in mathematics. We received an NSF grant through CURM, the Center for Undergraduate Research in Mathematics.


We presented results from monitoring observations of the gravitationally lensed quasar RX J1131-1231 performed with the Chandra X-Ray Observatory. We detected significant microlensing in the X-ray light curves of the lensed images of the quasar. Our microlensing results place constraints on the sizes of the black holes accretion disk and the hot corona. We also reported the evolution of the fluorescent Fe line that originates from the accretion disk during the microlensing event. This evolution is consistent with the line distortion expected when a caustic passes over the inner disk where the shape of the fluorescent Fe line is distorted by general relativistic and Doppler effects. George Chartas is an assistant professor of physics and astronomy at the College of Charleston. Drew Moore, an astrophysics major, participated in the research for independent study credit during his sophomore and junior years. Drew Moore is currently a senior astrophysics major at the College of Charleston. The research was supported by NASA via the Smithsonian Institution Grants SAO GO0-11121A/B/C/D; SAO GO1-12139A/B/C; and GO2-13132A/B/C.

Galván, YV, Veszal BS, Golley MT. The Effects of Cell Phone Conversations on the Attention and Memory of Bystanders. PLOS ONE. 2013; 8:1. (University of San Diego)

In this study, participants either overheard a one-sided (cell phone) conversation or a typical (two-sided) conversation. Participants only overheard the conversation one time and were unaware that the conversation was part of the study. Results revealed that participants who overheard the one-sided conversation found the conversation more distracting and annoying. They also remembered more words from the conversation and were more confident in some of their answers on a surprise memory test. This is the first study to use a ‘naturalistic’ situation to show that overhearing a cell phone conversation is a uniquely intrusive and memorable event. Veronica V. Galván is an assistant professor in the department of Psychological Sciences. Rosa S. Veszal is a senior psychology major and volunteered as a research assistant. Matthew T. Golley conducted this study as a senior psychology student for credit through his home university, D’Youville College. Mat is currently a graduate student in clinical psychology at Palo Alto University. This research was funded by a Faculty Research Grant.


A new sensor with gold nano-structures buried underneath ultrasmooth gold surfaces was developed for surface plasmon resonance (SPR) biosensing. Unlike other SPR biosensors, this device allowed the use of opaque or highly scattering liquids as well as spectral tunability and wide-field imaging. Beyond biosensing, these buried nanostructures with ultrasmooth surfaces can benefit nano-photonic waveguides, surface-enhanced spectroscopy, nano-lithography, and optical trapping for biological research. The work was featured as a backside cover article. Nathan Lindquist is an assistant professor of physics at Bethel University and Sang-Hyun Oh is an associate professor of Electrical Engineering at the University of Minnesota. Lauren Otto began work on this project during the summer of 2011 as an REU student and is currently supported by a PhD fellowship at the University of Minnesota. The research was supported by a National Nanotechnology Infrastructure Network (NNIN) REU that was awarded to Lauren.


The development of spectroscopic and electrochemical devices that can accommodate very small samples is of considerable importance to many areas of science and technology. This article describes the design and characteristics of a simple apparatus for the electrochemical and spectroelectrochemical analysis of submicroniter aqueous samples. Excellent performance has been demonstrated via measurements on aqueous ferricyanide solutions using sample volumes as low as 20 nl. Paul Flowers is a profesor of chemistry. David Blake is an undergraduate student majoring in chemistry. He assisted Flowers in conducting the published work during the summer of 2012 with support from an Undergraduate Scholar Assistantship provided by the Pembroke Undergraduate Research and Creativity Center. Blake is currently applying to graduate programs.

This paper highlights the limits of applying macro-level peace and reconciliation strategies to the Congolese situation and asserts that political, economic, and social cleavages at the local level continue to fuel national instability. The study draws on African experiences of transitional justice in Sierra Leone and Rwanda to offer specific lessons on how institutions at multiple levels of analysis can work together to foster peace and accountability. Lori Hartmann-Mahmud is the Hower associate professor of international studies Brian Klosterboer is the primary author of this article. He conducted the research throughout the year 2011-12 for his senior thesis project with support from the John C. Young scholars program at Centre College. Brian is currently in Uganda on a Fulbright Research Grant, studying the relationship between the media and peace-building. The John C. Young program supports senior research for a small number of highly qualified students (usually 6-10 per year), of which Brian was one in 2011-12.


The present study was undertaken to gain insight into the associations of mercury(II) with dicysteinyl tripeptides. We investigated the effects of increasing the distance between cysteinyl residues on mercury(II) associations and complex formations. The results from this study show that dicysteinyl tripeptides are effective in binding mercury(II) and they are promising motifs for the design of multi-cysteinyl peptides for binding more than one mercury(II) ion per peptide. Maria Ngu-Schwemlein is a professor of chemistry. Jeremy Brooks is currently working as a chemistry at Kelly Scientific Resources. Matthew Bronson is a graduate senior. This research was supported by the NSF RUI Grant CHE 1011859, and the NIH NIGMS SC3 Grant SC3GM088134.


This paper completely classifies the group of color preserving automorphisms for the graph of any finite group. These complete edge colored graphs, related to Cayley digraphs, generalize to algebraic structures besides groups. Tom Sibley is a professor of mathematics. David Byrne and Matt Donner did their research for their honors theses their senior year (2010-2011). David is in a doctoral program in mathematics at Bowling Green State University. After volunteering abroad, Matt is applying to doctoral programs in mathematics. We received an NSF grant through CURM, the Center for Undergraduate Research in Mathematics.


We presented results from monitoring observations of the gravitationally lensed quasar RX J1131-1231 performed with the Chandra X-Ray Observatory. We detected significant microlensing in the X-ray light curves of the lensed images of the quasar. Our microlensing results place constraints on the sizes of the black holes accretion disk and the hot corona. We also reported the detection of evolution of the fluorescent Fe line that originates from the accretion disk during the microlensing event. This evolution is consistent with the line distortion expected when a caustic passes over the inner disk where the shape of the fluorescent Fe line is distorted by general relativistic and Doppler effects. George Chartas is an assistant professor of physics and astronomy at the College of Charleston. Drew Moore, an astrophysics major, participated in the research for independent study credit during his sophomore and junior years. Drew Moore is currently a senior astrophysics major at the College of Charleston. The research was supported by NASA via the Smithsonian Institution Grants SAO GO0-11121A/B/C/D, SAO GO1-12139A/B/C, and GO2-13132A/B/C.

Galván VV, Vessal BS, Golley MT. The Effects of Cell Phone Conversations on the Attention and Memory of Bystanders. *PLOS ONE*. 2013; 8:1. (University of San Diego)

In this study, participants either overheard a one-sided (cell phone) conversation or a typical (two-sided) conversation. Participants only overheard the conversation one time and were unaware that the conversation was part of the study. Results revealed that participants who overheard the one-sided conversation found the conversation more distracting and annoying. They also commented more often about the conversation and were more confident in some of their answers on a surprise memory test. This is the first study to use a ‘naturalistic’ situation to show that overhearing a cell phone conversation is a uniquely intrusive and memorable event. Veronica V. Galván is an assistant professor in the department of Psychological Sciences. Rosa S. Vessal is a senior psychology major and volunteered as a research assistant. Matthew T. Golley conducted this study as a senior psychology student for credit through his home university, D’Youville College. Matt is currently a graduate student in clinical psychology at Palo Alto University. This research was funded by a Faculty Research Grant.


A new sensor with gold nano-structures buried underneath ultrasmooth gold surfaces was developed for surface plasmon resonance (SPR) biosensing. Unlike other SPR biosensors, this device allowed the use of opaque or highly scattering liquids as well as spectral tunability and wide-field imaging. Beyond biosensing, these buried nanostructures with ultrasmooth surfaces can benefit nano-photonic waveguides, surface-enhanced spectroscopy, nano-lithography, and optical trapping for biological research. The work was featured as a backside cover article. Nathan Lindquist is an assistant professor of physics at Bethel University and Sang-Hyun Oh is an associate professor of Electrical Engineering at the University of Minnesota. Lauren Otto begun work on this project during the summer of 2011 as an REU student and is currently supported by a PhD fellowship at the University of Minnesota. The research was supported by a National Nanotechnology Infrastructure Network (NNIN) REU that was awarded to Lauren.


The development of spectroscopic and electrochemical devices that can accommodate very small samples is of considerable importance to many areas of science and technology. This article describes the design and characteristics of a simple apparatus for the electrochemical and spectroelectrochemical analysis of submicroliter aqueous samples. Excellent performance has been demonstrated via measurements on aqueous ferricyanide solutions using sample volumes as low as 20 nL. Paul Flowers is a professor of chemistry. David Blake is an undergraduate student majoring in chemistry. He assisted Flowers in conducting the published work during the summer of 2012 with support from an Undergraduate Scholar Assistantship provided by the Pembroke Undergraduate Research and Creativity Center. Blake is currently applying to graduate programs.