

Department of Physics Loomis Laboratory of Physics 1110 West Green Street Urbana, IL 61801-3080

July 29, 2016

Nomination of Celia Mathews Elliott for the 2016 SPaRC Career Achievement Award

Dear SPaRc Award Selection Committee,

It is my great honor and pleasure to nominate my colleague **Celia Mathews Elliott** for the 2016 SPaRC Career Achievement Award for her extensive and extraordinary contributions to the research enterprise in the Department of Physics over the last 20 years. Her dedication to helping our faculty write proposals, administer their grants, prepare required reports, and communicate the products of their research via presentations, publications, and reports has had a tremendous impact on the ability of our people and our programs to attract funding for research and to disseminate the outcomes. She is richly deserving of this recognition from the Sponsored Programs and Research Compliance office. My nomination of behalf of the Department of Physics is supplemented by a nomination from Brian DeMarco on behalf of the Physics faculty and by a series of letters from faculty spanning our age distribution and research portfolio that documents the many ways in which Celia has impacted them in their mission as educators and researchers.

Celia is officially the "Director of Special Events and Alumni Relations" for the Department of Physics. This title does not come close to describing the many essential roles that Celia plays in our department. She serves an Administrative Assistant to me as the Head of the Department of Physics, helping me to write reports and nomination letters for our faculty. She sits on the Physics Cabinet, the core leadership team that largely sets the policies and procedures in the department, along with the head, associate heads, and business manager --- a testament to the respect and impact she has throughout our program. She co-teaches our Undergraduate Thesis Course that trains our students in the art being researchers, covering how to write papers, proposals, and reports, how to give presentations, and how to conduct themselves as objective and ethical scientists. She helps run our NSF-REU program that brings a dozen students from underrepresented demographic groups to Urbana each summer to participate in research activities. She is our department historian, keeper of the archives and institutional memory of our storied program. Until recently, she also was the lead person in our alumni relations, communications, and web management, roles that have been replaced with three separate hires as we have strived to enhance our image and visibility.

But of all her roles, the one most relevant for this nomination and the one that most affects our extensive research enterprise, is her role as the primary contact of our faculty for identifying grant opportunities and writing and submitting competitive research proposals to a myriad of federal agencies including NSF, DOE, NIH, and DOD, foundations, and industry corporations. As the number and complexity of proposals written by faculty our has risen, and as the challenges of meeting the stringent compliance rules of the agencies has grown, Celia has devoted more and more of her time to this aspect of her job and it now occupies most of her time. It is a task of immeasurable importance to the department, one that she does with extraordinary excellence, style, and class and one for which she has as much pride and takes as much responsibility as the faculty who seek the funding for their research.

Celia's work ethic and her commitment to her job is extraordinary. She works late on most days and most weekends and is always on call to me, our faculty, our staff, and even to our students to provide help in person or online. Even more impressive is how many things she is engaged in at any time and how much she accomplishes. Our estimate is that she helps to prepare ~50 proposals per year, many of which cluster into a few peak periods near deadlines for grant agencies. For Celia, "prepare" means to provide whatever help the faculty member requires to create a strong, compelling, and compliant proposal --- that can range from simply checking that the proposal is complete and meets agency requirements for formatting and style, to essentially editing and re-writing every word to present the research plan more clearly and precisely. In all cases, Celia has a unique way of sharing in the responsibility to submit the proposal and, as a result, sharing in the excitement of winning the grant or the disappointment of not getting it. I know all of this first hand because she has helped me on many proposals and a few times, in her own words, "dragged me across the finish line" to get a proposal finished and submitted on time. It is invaluable support for our faculty, both young faculty who have not yet learned the fine art of proposal-writing and the experienced faculty who know what to do but but are distracted by other responsibilities.

Celia has many traits and skills that makes her uniquely effective in helping the faculty prepare quality proposals. One is her welcoming and approachable style --- no matter how busy she is, I have never seen her not willingly agree to answer a question or discuss an issue with someone who comes to her, as I and many often do. Another is her vast knowledge and memory --- she is widely known within our department and beyond as someone who can and will help anyone, at any time, about anything. Another is her impressive (enviable) organizational skills --- she is able to keep track of all of the many necessary interwoven components of a proposal and convey that clearly to the PI. Another is her attention to detail, essential for navigating through the complex and ever-changing rules and regulations of grants agencies, our University, and the State. Most important of all, Celia is a truly remarkable technical writer. She has an ability to edit and, if necessary, re-write anything to make it sound better and read more clearly. And she does all this with no formal scientific training --- she was trained in creative writing and does not have a science background, but you will swear that she is a physicist when you read her technical writing. Her long experience working with physicists has taught her our language, our motivations, and even a lot of our science. Although she may not understand all of the details of a technical proposal, she can make anything we write sound better, clearer, and more compelling, a remarkable skill and immeasurable asset for our quest to seek funding in a competitive environment.

Celia's brilliant writing skills translate to many other aspects of our research and education endeavor. In addition to helping to get funding for our faculty, she help them manage and steward their grants through annual and final reports, budget revisions, no-cost extensions, and other functions on which she works in collaboration with our business office. She also helps me to nominate our faculty for awards and recognitions, critical to their attracting funding and enhancing visibility for their research contributions. We nominate and recommend dozens of our faculty each year for awards ranging from local College and University recognitions, to national physics society prizes, to funding agency young investigator awards, and to major awards such as the National Medal of Science and the Nobel Prize. I have often been praised for my "elegantly written" nominations, many I must admit were largely penned by Celia --- I can often improve the letters that Celia drafts by adding to the content, but I can rarely make the prose read better. The most difficult part of preparing this particular award nomination is that I had to do it alone, without Celia's expert guidance and beautiful words --- I just hope I have learned enough by watching her over the years to make this nomination successful!

Celia has made many other contributions to physics research and grantsmanship outside of our department. She has presented technical writing and proposal-writing workshops at Sandia National Laboratories, Lawrence Livermore National Laboratory, the University of Sao Paulo (Brazil), and National Chiao Tung University (Taiwan), and she has participated in four webinars for the American Chemical Society on scientific communications. She has answered questions on technical writing in two Reddit\science "Ask Me

Anything" appearances, and her lectures on scientific communications have been downloaded by people from more than 90 countries. She was presented an honorary doctorate in humane letters from South Ural State University (Russia) in 2003, and the Civilian Research and Development Foundation's *Recognition Medal* in 2005 for her work with scientists in the former Soviet Union. She received the *Chancellor's Academic Professional Excellence Award* from the University of Illinois in 2002, and the American Physical Society's *Physics Haiku Grand Champion* prize in 2004. Her teaching was recognized by the Department of Physics with the *Doug and Judy Davis Award for Excellence in Teaching Undergraduate Physics* in 2013.

Celia Elliott is a remarkable woman and invaluable contributor to the Department of Physics. I think it would be fair to say that she is the most irreplaceable employee in our department because of her unique skills, the number of people she impacts daily, and the number of alumni and friends who regard her as the point-of-contact of our program based on the experiences that they had with her when they were here. As Head of the Department of Physics for the last 10 years, she has been one of my most reliable and trusted confidants on all matters in the department, a label that I think many of our faculty might also apply to her. Relevant to this nomination, her dedication to making our proposal submission process as efficient and effective as possible has been a major factor in the successes our department has achieved over the past 20 years, helping us to achieve our top-ten ranking among Physics departments (second among public universities) and #1 ranking in Condensed Matter Physics, all of which we are very proud.

I encourage you to select Celia for the SPaRC Career Achievement Award ---- it would be a much deserved recognition of what she has done for our program and for the many people she has touched in her long illustrious career at the University of Illinois.

Sincerely,

Dale J. Van Harlingen

Head and Professor of Physics

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Department of Physics

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Dr. Brian DeMarco Professor

July 26, 2016

SPaRC Retreat Committee:

It is my pleasure to nominate Celia Elliott for the SPaRC Career Achievement Award. Celia's impact on research administration are outsized compared with any equivalent staff person I know of at any domestic university. Since she joined the Physics department in 1996, Celia has helped to write, administer, and submit approximately 40 grant proposals per year for faculty (totaling about 800 proposals!), including large and complex proposals such as those for National Science Foundation Physics Frontier Centers. Celia trained every junior faculty we have hired since 1996 on crafting grant proposals and the grant application process and assists all our Through these activities, Celia has directly contributed to our faculty with these tasks. excellence as a department: we are ranked 9th overall among Physics departments in the US, and 1st in condensed matter physics based on our research excellence. Uniquely for someone in her position, Celia has an international profile in research administration. She has, for example, played a key role in training scientists in the former Soviet Union in grant proposal writing and regularly produces webinars for the American Chemical Society. I know of no other individual at any university in the US with a comparable impact on research administration on the local, national, and international level.

My interactions with Celia have shaped my career. I was hired as an assistant professor in Physics at Illinois in 2003. Like most new faculty, I had no experience in grant proposal writing and little practice in working with staff. Also like all new faculty in the physical sciences, I starting writing grant proposals as soon as I arrived. I immediately realized that I had no idea how to start! So, I talked with Celia, and she explained the entire process of proposal writing and submission. She also taught me (over several years) how to conceptualize and construct a successful proposal. Celia provided extensive and iterative feedback on my first handful of proposals. Celia often minimizes her technical knowledge—her understanding of physics subject matter and as a discipline is broad and deep. She is therefore able to provide feedback on content and strategy as well as language usage. I learned more from Celia about successful proposal writing than from any faculty colleague. My experience is not unique—I have observed Celia coach many of our young professors.

Celia helped me to develop a consistently successful track-record on individual PI proposals. These days, she no longer reads every part of a proposal for me. Instead, she stays on top of the constantly evolving bureaucratic procedures for submission and handles the submission process. She also writes boilerplate sections of proposals for me, such as text on facilities and data handling. Some of our faculty operate this way, but many (perhaps most) have Celia provide intensive feedback on proposals and help with writing throughout their careers.

I think of Celia as a powerful faculty multiplier. Her energy, accuracy, enthusiasm, and activity level are so high that she relieves faculty from the many tasks related to research administration that do not require our expertise. Hence, we are all left with more time for

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Dr. Brian DeMarco Professor

research activities and conceptualizing new and exciting research directions. Celia's contributions have become increasingly important as federal funding for science has contracted and grant proposal success rates have dropped. I am not aware of another Physics department that has an equivalent staff-person who achieves at Celia's level. Colleagues at other institutions are incredulous when I describe Celia and her contributions. I introduce all perspective faculty to Celia during their campus visits and explain how she is an invaluable resource.

Part of what makes Celia so incredible is her indefatigable support and enthusiasm for Physics. She is constantly available to faculty: the only times I have not had a response to an email within an hour is when she is in a meeting, physically incapacitated, or on her once-a-year vacation to Florida. Celia's activities are woven throughout our department. For example, she co-teaches a capstone course for our majors on professional skills and communication, develops nominations for national awards for our faculty and students, and manages special activities such as our 50th celebration of BCS theory (i.e., the theory of superconductivity, which led to a second Nobel Prize for Illinois Physics Professor John Bardeen). Celia is so passionate about physics that she has become an award-winning physics poet! One of two pieces she wrote that won the 2004 American Physical Society haiku contest reads:

Irresistible Force

Tripped. Fell on my ass. Awesome demonstration of F = ma.

Celia also has a significant international reputation and footprint in research administration. Most importantly (in my opinion), she has worked over many years to teach grant proposal writing to scientists in the former Soviet Union. These activities are extensive and include giving talks and workshops at 22 institutions, including the Russian Federal Nuclear Center. I cannot overemphasize the importance of this contribution. Over the last couple of years, I have become involved in national security and defense work. The knowledge, armaments, and fissile material present in former Soviet areas pose a significant international risk. The single most important approach to dealing with this risk is developing ties with the scientists in those locations and helping to create new opportunities for them. Celia has been an integral part of that task.

Celia is being tapped more widely and at higher levels as her international reputation has grown. She regularly produces webinars for the American Chemical Society on grant proposal and scientific writing. Celia has also been asked by Sandia National Labs to work with their scientists on the same topics. Most telling is that the Department of Defense and the National Science Foundation asked Celia for feedback and help on designing their most recent interface—grants.gov—for grant proposal submission and reporting. Reddit, one of the most broadly read and influential websites, also asked Celia to participate in two "Ask Me Anything" events about

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Dr. Brian DeMarco Professor

technical and scientific writing. It is difficult to imagine someone more impactful on research administration at Illinois or elsewhere!

Celia has made numerous significant and sustained contributions to research administration throughout her career at Illinois. Her positive impact on faculty careers and the success of our department cannot be overstated. Celia's influence on research administration even reaches beyond the borders of our nation in critical ways. I cannot imagine someone more deserving of the SPaRC Career Achievement Award.

Best Regards,

Prof. Brian DeMarco

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July 29, 2016

Dear SPaRC Career Award Selection Committee:

I am delighted to support Celia Elliott's nomination for the 2016 SPaRC Career Award. I can't think of a person who has done more to help individuals and groups—both inside and outside the Department of Physics—in all aspects of the research proposal writing and submission process. Let me touch on just a few of the many sustained contributions that Celia has made to research administration on campus.

<u>Proposal Writing Presentations and Tutorials</u> – Celia is well-known across campus as the "proposal writing guru" because of the many highly useful proposal-writing presentations she has given on and off campus, most of which she makes available on her website (e.g., see http://physics.illinois.edu/people/profile.asp?cmelliot). These proposal writing resources include tutorials on all aspects of proposal writing to most major funding agencies (e.g., NSF, NIH, DOE, etc.), including proposal formatting requirements, effective content for successful proposals, budgets and budget justifications, CV formats for different agencies, effective project summaries, and technical progress reports. These presentations, webinars, and posted tutorials have helped countless principal investigators hone their proposal writing skills and create successful proposals.

Real-Time Proposal Guidance — As I'm sure will be mentioned in the nomination letter, practically every individual and group proposal submitted through the Department of Physics—and many interdisciplinary proposals involving physics faculty submitted through other units such as the Materials Research Laboratory, the Institute for Genomic Biology, etc.—are subjected to Celia's keen editorial eye. Celia has an amazing eye for detail and is a superb writer, and there is no question that her review of proposals before submission has led to a greater funding success rate: For example, Celia takes great pains to keep up with the myriad (and often inscrutable) proposal guideline changes instituted, often yearly, by the major funding agencies, and Celia been able to catch numerous proposal formatting errors that would have led many, many proposals to be "returned without review." Additionally, while Celia is not a trained scientist, her impeccable editorial judgment and strong sense of a weak logical argument in proposals have consistently enabled her to fashion clearer and better organized proposals. There is no question that Celia's efforts have contributed to a greater success rate of proposals submitted by faculty in the Department of Physics.

NSF/DOE Graduate Fellowship Training – Perhaps less conspicuous than the essential proposal-writing help Celia provides faculty members, is the guidance and training she has provided over the years to graduate students applying for NSF, DOE, NDSEG, and other graduate fellowships.

Each fall semester since 2011, Celia has helped run an NSF/DOE grad fellowship proposal writing workshop in which graduate students in astronomy, physics and materials science have been given training on effective proposal writing. Each of the last 5 years, Celia has also helped run an NSF/DOE grad fellowship precompetition, in which grad students from several departments have been asked to pre-submit their fellowship applications for critical review. These workshops and accompanying precompetitions have been associated with a dramatic increase in the number of NSF graduate fellowships awarded to physics, astronomy, and materials science, from 1 NSF graduate fellowship award (and 1 NSF Honorable Mention) received in 2011 to 6 NSF graduate fellowship awards and 5 NSF Honorable mentions received in 2016. Lest you think these awards have little to do with "research administration," please keep in mind that just 1 NSF fellowship provides a graduate student approximately \$100K of support for 3 years, thereby freeing research funds for other students or uses. Consequently, the 6 NSF graduate fellowships received by these three departments last year are equivalent to a \$600K 3-year research grant. But the importance of Celia's efforts to help students hone their fellowship and proposal writing skills goes beyond the fellowship awards received: by providing instruction on how to write effective and persuasive fellowship applications, Celia is training our students—the next generation of researchers—to be successful in their future research and proposal-writing endeavors. Notably, Celia's efforts in this important area of training were acknowledged article in on-line by the UIUC Graduate College. https://news.illinois.edu/blog/view/6367/350249.

<u>Proposal-Writing Training for Students</u> – Another important contribution that Celia has made to graduate training in proposal writing is her co-development of a pair of courses that provide communications skills and proposal-writing training to undergraduates (Physics 496/499) and graduate students (Physics 598 PEN). These unique courses have been among the most popular courses taught in the Department of Physics, as they provide training—not available elsewhere on campus—in areas that our undergraduate and graduate students know will be important in The popularity of these courses goes well beyond the their future research endeavors. Department of Physics. Physics 598 PEN, for example has provided scientific writing and presentation skills training—including practice writing journal publications, referee reports, abstracts, and proposals—to more than 60 PhD and MS degree students from 7 departments (Astronomy, Atmospheric Sciences, Civil Engineering, Electrical Engineering, Materials Science, Mechanical Engineering, and Physics). By providing advanced training in journal and proposal writing to our undergraduate and graduate students, Celia is fulfilling the highest mission of our university, to create educated students who will be successful in the future technical careers.

The above comments provide only a small sampling of the many contributions that Celia has made—and continues to make—to the Department of Physics and the University of Illinois. I can summarize my feelings about Celia best by stating that if our department had a "Most Valuable Player" award, I would nominate Celia without hesitation: Celia is tireless in her many efforts (I see her often working after hours and on weekends, and if you send her an e-mail at an odd hour, you're likely to get an immediate response, because she's frequently working at home or while on vacation); she is a superb teacher; and if you surveyed our department as to the person who contributes most to improving the research and teaching efforts of others in the department, I'm confident that Celia would be ranked at the top. In fact, last December, the physics graduate students essentially awarded Celia the Department MVP award during the department's annual Physical Revue celebration, when they gave Celia the Physics Graduate

Student Appreciation Award for her many contribution to the department. I hope you'll also recognize Celia's many significant contributions to teaching and research on campus over the years by awarding her the 2016 SPaRC Career Achievement Award. I can't think of a more deserving recipient of this award.

Sincerely,

S. Lance Cooper

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Associate Head for Graduate Programs **Professor of Physics** University of Illinois, Urbana-Champaign (217) 333-2589

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Recommendation for Celia Elliott:

It is a great privilege to recommend Celia Elliott for the SPARC Award. I could not think of a better candidate for this award. She has been the most helpful staff member I have ever met. Ever since I came to Illinois she has helped our grants succeed, she has not only helped us submit the grants to NSF, but also strongly improved the writing. I am certain that her help has often improved a proposal's chances to be approved for funding. She also taught our group very valuable lessons about excellent technical writing in the process. She has helped set up the budget and given invaluable advice on NSF's and DOE's policies and expectations. She routinely sends us announcements of relevant funding opportunities from federal and private funding agencies, and has helped connect us with leading researchers in industry, that have donated several workstations to our group as a result of her initiative to introduce us to them.

I have also sat in on her outstanding class on technical writing. Her class has been the most helpful class on professional skills I have ever attended. Being a technical writer by training, she knows how to write extremely well. Being the born teacher that she is, she also knows how to teach exceptionally well. I have learned very much about grant writing by just listening to her excellent lectures. I have passed on her class notes to our graduate and undergraduate students, who now use them routinely when they write scientific papers. Her class notes map out the process of writing a scientific paper – they break it down into manageable pieces that even the youngest undergraduate students can handle with ease. She thus helps the students overcome their fear of writing. The papers written by students that took her class read as if they were written by experienced scientists. She also teaches the students to present scientific posters and talks, so that when they leave Illinois their professional skills much farther developed than those of their peers. I have attended the undergraduate research symposium that she organizes every year for the students that took her class, and found that the students' talks and posters are on par with those of experienced researchers at regular research conferences.

I require that all of the students in our research group take her class. Her class has saved us thousands of hours of having to rewrite first drafts that inexperienced students would write, because she teaches the students how to structure their papers well, so that their first drafts are very readable and clear. She also teaches them how to write winning proposals, which will be invaluable for their future careers, both in academia and the private sector. Our undergraduate students have told me that her class is one of the most valuable classes in our physics curriculum because the writing skills that she teaches are applicable in any type of work later, both in academia, and in the private sector. Those students that graduated and moved on to grad school elsewhere told me that her class put them far ahead of all their peers in writing and presentation skills.

Celia is more dedicated to supporting faculty and students in their research than any staff member I have ever met. When we are writing grant proposals she has been available to help day

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and night, weekdays and weekends, even when she was out of town or on vacation. I have gotten emails from her to help us with a grant proposal at midnight on a Saturday night, and at any time on her vacation.

Through her tireless efforts we have received many grants that would have been very difficult to win without her. Our collaborating PIs from other departments and universities have often told me that Celia is absolutely unique, with regard to her outstanding professional skills, her unmatched enthusiasm for the work, her brilliant suggestions for improving any given proposal, and her tireless willingness to do whatever it takes to get the job done excellently and on time. Her wisdom, enthusiasm and warm personality even in the most stressful of times have encouraged me many times – she is a great example to me.

I could not think of a better candidate for this award, and I recommend her in the strongest terms possible.

Sincerely,

Karin Dahmen Professor of Physics

University of Illinois at Urbana Champaign

arin Dahmen

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Department of Physics

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Tuesday, July 26, 2016

Dear Retreat Committee,

I am writing this letter in strong support of Celia Elliot's application for the Sponsored Programs and Research Compliance (SPaRC) Career Achievement Award. Celia is a vital asset to the Department of Physics, and has been an indispensable help to me personally.

As a junior faculty member, I have repeatedly worked closely with Celia in a variety of contexts over the past four years, including giving some lectures for her PHYS 496 course "Introduction to Physics Research," and, most importantly to me, she has provided completely invaluable assistance to me in preparing and submitting research proposals to federal and private funding institutions. She is intimately familiar with the frequently arcane and byzantine regulations and procedures required for successfully completing proposals. Any success that I've had with funding agencies has been due in no small part to her and her help, and I genuinely believe that without her my job would be significantly more stressful, time consuming, and generally unpleasant.

Moreover, Celia has been extremely generous with her time. As proposal deadlines loom, she seems to be available to help in any capacity seven days a week, 24 hours a day. I have, on many occasions, made last minute changes to proposals late in the evening on a weekend, only to get a positive response and immediate action from Celia a few minutes later. Her attentiveness and attention to detail is really remarkable, and I know that I can always count on her to get things done.

I conclude by noting that I am even more grateful for all of her guidance and help, as I am but one of many people within the department for whom she provides this level of guidance and assistance, including faculty, graduate students, undergraduate students, and postdocs. She has been one of the most valuable resources for me in the Physics Department, and I wholeheartedly lend my support to her application.

Sincerely,

Thomas E. Kuhlman

University of Illinois at Urbana-Champaign

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Paul R. Selvin
Professor of Physics & Biophysics
Professor Affiliate, Cell & Developmental Biology

July 29, 2016

Dear Sir.

This is a nomination for Celia Elliott for the Career Achievement for the SPaRC Awards. To put it bluntly:

I COULD NOT IMAGINE A PERSON MORE QUALIFIED TO WIN THIS AWARD.

As way of background, I am a full professor of the Department of Physics, plus the Biophysics Group and other department affiliations. I do research in biophysics and therefore write a tremendous number of grants—to NIH, the NSF, and many private foundations, such as the Keck Foundation and Cottrell Foundation. Because of the limitations of federal funds, the amount and number of such grant applications has grown over time. I have also applied for fellowships to many foundations, such as the Sackler Award and the American Institute of Physics.

I have been at this university of 19 years, and Celia has been the main person who has helped me apply for these awards/grants since nearly the beginning. She has always done an excellent job: in fact, I feel that I have had so much success (yes, I happen to have won quite a number of these awards and grants), largely because I have Celia's excellent ability to write and to deal with the (increasing complex) bureaucracy. She manages to turn what is incredibly frustrating events into actually fun events. For example, I actually enjoy discussing with her seemingly arcane question about the use of comma's.

She never takes credit for it, but her copy-editing is truly fantastic. In fact, she's so good at writing that she has become a writing teacher in the physics department, trying to teach the undergraduate students how to write. This problem has always been a serious effort, but recently, with the increase in student enrollment (it has tripled in the past 5-or-so years) and particularly the increase in international students, this has become all-important.

I'm always amazed how extensively she can copy-edit. I've asked her how she does this, since she can't possibly understand the technical aspects. She says it's not a problem, and I know she does this for other professors for which I can't imagine doing it myself.

Just a few months ago, I had 3 NIH grants due within a month and she made a list of things that needed to get done, whether we could use the same materials, coordinated with our financial people, fill out the (at times, seemingly crazy) forms, put it all together and then turned it in. (She says she has great job security because no one else is able to figure out the new and confusing forms!)

It is not only with grants, but on the yearly follow-ups required for grant renewals, that she is so excellent. My standard response to the many emails I receive is to forward them onto Celia who tells me what to do and when to do them, and then makes sure that they get in on time. Often times, she will also fill in some prose associated with some aspects (like computer use by graduate students), and I've learned that her responses are almost always accurate. She also takes responsibility for getting the

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Paul R. Selvin Professor of Physics & Biophysics Professor Affiliate, Cell & Developmental Biology

budget together and alerting me to over- and under-spending and what students I actually paid off of the particular grant.

The same goes for nominations for individual awards. For example, I had to write a 1-page summary of my work for the Sackler Award (given out to the one person who has done the most significant biophysics research in the whole world). There is no doubt that her editing was exquisite, that her ability to get (busy) professors to write letters of recommendations, and to have it done on time, was truly excellent.

Celia is well worthy of the SPaRC Career Achievement Award.

Sincerely,

Paul R. Selvin

Liang Yang Assistant Professor Department of Physics 1110 West Green Street Urbana, IL 61801-3080



July 28, 2016

Dear SPaRC Award Selection Committee,

It's my great pleasure to write this letter in my strongest support of Celia Elliot's nomination to the 2016 SPaRC career achievement award. Since I joined the Department of Physics as an assistant professor in 2012, Celia has assisted me in 10 different grant proposals and fellowship applications. Throughout the process, I am constantly impressed by her deep knowledge and superb expertise in grant proposal preparation and education outreach, as well as her total dedication to supporting and assisting the faculty. Without her support, I would not have been successful in receiving grants from National Science Foundation (NSF) and Department of Energy (DOE).

Celia is a talented writer and editor with extensive experience in grant writing. I am very lucky to receive support from her for my proposals in the past few years. I wrote my first proposal to NSF in the fall 2011 before I arrived on the Illinois campus. Since I was new to the process, the draft was not well-structured and littered with mistakes. I vividly remember the email from Celia, which was a very long list of comments, suggestions and corrections from the overall structure to minor typos. It was extremely helpful for a young faculty to receive such detailed, objective and constructive feedback. Grant writing was not a skill I learned as a graduate student or a postdoc. Celia served as a mentor to me in this area. She was patient yet strict. She helped me analyze reviewers' comments after the initial proposals were rejected and provided valuable feedback on how to rewrite the proposals. With her help, I have improved my proposal writing skills and succeeded in securing external funding, yet I continue to learn from Celia on how to write more clearly and effectively. She is always willing to help me with not only grant proposals, but also post-award reports and news articles highlighting research results. I am grateful for her continued support and mentorship.

Celia is an expert in science education outreach. She has helped many faculty members develop realistic and impactful educational plans. For NSF proposals, in particular the prestigious CAREER awards, excellent educational plans are necessary and can often be a determining factor for the success of the proposals. In preparing for my NSF CAREER proposal a couple of years ago, I worked closely with Celia on developing an outreach program to middle school students. Celia first pointed out to me that middle school is when many students lose their interests in STEM disciplines, but there aren't many outreach activities in that area. She connected me with a local organization – the Association of Illinois Middle Schools (AIMS) and encouraged me to participate in their annual meetings. At the meeting, I met many middle school teachers and found that they were excited yet concerned about the adoption of the Next Generation Science Standards (NGSS) at Illinois. Together with Celia, I developed an education plan aimed at middle school science education. The plan includes organizing workshops on physical science teaching for middle school teachers as well as connecting middle school students with science majors at UIUC. Celia also helped me connect with colleagues at the

Office for Mathematics, Science, and Technology Education (MSTE) and the School of Education, who agreed to provide their expertise in K-12 education and education assessment in support of the educational plan. The education component of the proposal received high marks from mail reviewers and the NSF panel.

Celia is always available to provide her assistance. I have never seen anyone more dedicated to the work in research support. In spring 2014, I heard from a colleague that DOE was conducting a competitive review of all new proposals together with the bottom one third of continuing grants. This was an excellent opportunity for new groups to get funded for the first time. However, by the time I heard about the news, there were only one week left before the deadline. I wasn't sure if it would be feasible to write and submit a proposal within such a short time period. I discussed the opportunity with Celia. She encouraged me to try and assured me that she would be available any time of the day to provide support. We worked closely in the next few days on writing the proposal. Celia provided me with much needed editing and formatting support. She also talked with the Office of Sponsored Research (OSR) to make sure that staff at the office would be available to check the conformity of the proposal to federal grants and contracts rules. With the help of Celia as well as staff at OSR, the proposal was submitted just before the 5 pm deadline. This turned out to be my first successful federal funding proposal. Without Celia's guidance and support, this would certainly not have happened.

Although I have only known Celia for five years, she has become a close mentor and colleague. She cares deeply about young faculty like me, and is doing her best to help us obtain research funding and build successful research programs. From senior colleagues, I have also heard nothing but effusive praise for Celia. I have no doubt she will be a deserving recipient of the 2016 SPaRC career achievement award. If you have further questions, feel free to contact me.

Sincerely,

Liang Yang

Assistant Professor

University of Illinois at Urbana-Champaign Co-spokesperson, EXO-200 Collaboration