

The Matrix Letter

Fall 2018
Volume 17, No.3

A Publication of the American
Society for Matrix Biology

OFFICERS

PRESIDENT:

JOANNE MURPHY-ULLRICH (2018)

PRESIDENT ELECT:

LYNN SAKAI (2018)

PAST PRESIDENT:

SUNEEL APTE (2018)

SECRETARY TREASURERS:

AMBRA POZZI (2018)

COUNCIL MEMBERS:

THOMAS BARKER (2019)

ADAM ENGLER (2018)

DIRK HUBMACHER (2021)

MARION GORDON (2021)

ANDREW LEASK (2021)

MERRY LINDSEY (2020)

ALEXANDRA NABA (2020)

KAREN POSEY (2019)

CHRIS OVERALL (2018)

MICHELLE TALLQUIST (2018)

EDITOR

DWAYNE STUPACK



ASMB Workshop 2019
Fibroblasts: the Arbiters of Matrix Remodeling
June 23 - 25, 2019
University of Virginia
USA
**Doubling Down:
Two ASMB
Workshops
for 2019**
ASMB Workshop 2019 on
Membranes
July 10-12, 2019
Vanderbilt University Medical Center, Nashville, TN
Co-Chairs: Roy Zent and Jeffery Miner
VANDERBILT UNIVERSITY
MEDICAL CENTER



Contents

President's Letter	1	ASMB Award Winners	6
Inside the Elections	2	Editorial	8
Record Travel Awards	2	ASMB Workshops	9
Matrix Interactions	3	Positions	9
Interview with Dirk Hubmacher	4	Back Page	10

Letter from the President

Dear ASMB colleagues,

Wow! The recent **ASMB 2018 Biennial Conference** held in Las Vegas was such a stimulating and invigorating experience. I am quite encouraged by the amazing science discussed at the meeting and by the enthusiastic feedback of participants and guest societies, many of whom were new to **ASMB** meetings. It is also very gratifying to meet the many highly talented trainees and discuss matrix biology and their future careers. Congratulations are due to Lynn Sakai, the Programming Committee, and Kendra LaDuca for putting together such a robust meeting.



In this last issue of 2018, we recognize the ASMB awardees, talk a little about ASMB elections and interview Dirk Hubmacher, who is completing his freshman year as an ASMB councilor. However, ASMB is looking forward to 2019, too. In summer 2019, ASMB will be sponsoring two workshops. Tom Barker and Merry Lindsey are organizing a session on “Fibroblasts: the Arbiters of Extracellular Matrix Remodeling” to held at the University of Virginia June 23-25, 2019. Jeff Miner and Roy Zent will be reprising their very successful ASMB workshop on Basement Membranes held at Vanderbilt University Medical Center, July 10-12, 2019. More details can be on page 9, or at ASMB.net.

At the meeting last October in Las Vegas, **Matrix Biology** Editor-in-Chief, Renato Iozzo, and Elsevier publisher, Valerie Teng-Broug announced a second journal dedicated to extracellular matrix science. **Matrix Biology Plus**, which is a new open access journal which will complement **Matrix Biology**. The open access charges are currently waived. ASMB congratulates Renato and Valerie, the MB editorial board members, and to ASMB members for their outside work and contributions to this premier journal for our field.

ASMB Council held an extended council meeting on Saturday prior to the start of the ASMB meeting. At this meeting, Council decided to retain its even year biennial meeting schedule, institute a code of

conduct and ethics code for speakers, and we have stream-lined several committees to increase Council effectiveness.

As you are aware, ASMB just completed its elections. I am very pleased to welcome Jeff Miner as our new ASMB President-elect. Jeff will serve as Chair of the ASMB 2020 meeting and then move to President in 2022. Jeff has been very active in ASMB over the years and has co-chaired the 2017 and 2019 ASMB Basement Membrane Workshops. Ashley Brown, Rachel Lennon, and Andrea Page-McCaw were also elected to ASMB Council. These three women are leaders in matrix biology and Council will benefit from their insights and energy. There are several committee positions open, including chair of our membership committee, one of the most important committees at ASMB. Please let Lynn or Kendra know if you are interested in participating.

In the spirit of the holiday season, please consider making a tax-deductible donation to ASMB. This can be done easily at the ASMB website. Your contributions are essential for ASMB to continue to grow, to increase the impact and reach of matrix biology, and to promote the careers of our outstanding young matrix biology scientists.

This will be my last letter to you as ASMB President. It has been one of the greatest honors of my career to be able to serve the matrix biology community in this capacity. I thank the ASMB membership for giving me this privilege and opportunity. ASMB is in great hands as Lynn Sakai takes over as President in 2019, assisted by our engaged and committed Council members and by Executive Director, Kendra LaDuca. I am confident that we will continue to see innovative growth of ASMB in the years ahead. ASMB is such a collegial and welcoming community: please do not hesitate to become involved. This is an opportunity to be an advocate for matrix biology, but to also make fantastic friends.

Best wishes,

A handwritten signature in blue ink that reads "Joanne". The signature is fluid and cursive.

Joanne Murphy-Ullrich,
ASMB President

Inside the ASMB Elections



Elections seem to be in the news a good bit these days...

Did you ever wonder how the ASMB elections come together? What our process is for finding new council members and volunteer leaders?

For ASMB, by mandate, elections must occur each year. Each fall, around October, a call for nominations is announced to the membership. Open positions are advertised and ASMB members are encouraged to make nominations. Self-nominations are welcome.

The Nominating and Awards Committee also actively recruits volunteers to run for open positions. Every year, council positions are available for new volunteers to participate in ASMB leadership. Council members serve four year terms and each year 2 or 3 positions become open. The Secretary-Treasurer position is also a four year term. The President-Elect serves for two years, then becomes the President for two years, and finally serves as the Past-President for two years – a total of a six year commitment leading the organization in evolving roles.

Once nominations are received, ASMB confirms the interest and intent of the nominees to run for office. When the ballot is set, we launch the election. ASMB uses Survey Monkey for the actual mechanics of the vote. Each current ASMB member receives a unique link to vote and may only cast one ballot. The election remains open for approximately three weeks. Results are announced in early December and new positions begin January 1.

We are grateful each year to have many volunteers for the few positions that are open. This year ASMB had a record number of candidates for council positions and we are thrilled to see such interest in the society.

While council positions are limited, the number of volunteer opportunities is not. The ASMB welcomes involvement in committees, task forces, and planning groups, and many of our volunteers are not council members. If you'd like to be more involved with ASMB, let us know.

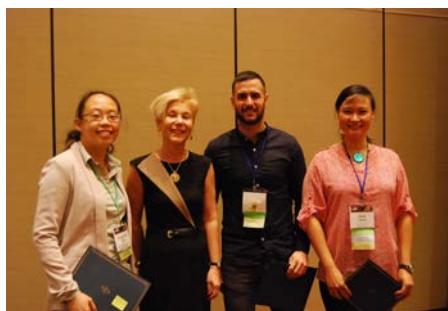
We welcome your participation!

ASMB 2018 Sees New Record in Travel Awardees

Since the birth of ASMB, there has been a focus on providing travel awards for graduate students and post-docs to attend the meetings. More than 100 recipients have been aided in attending meetings directly by ASMB or our partners. This past October in Las Vegas, 18 attendees were the recipients of travel awards. The Awardees hailed from not only the United States, but also from the United Kingdom, Germany, Israel, Australia and Canada.

The wealth of awards in 2018 is due, in part, to the partnering of ASMB with a guest society (*The Histochemical Society*), resulting in an additional five travel awards, and the *Alport Syndrome Foundation*, who sponsored two attendees.

Thanks are also due to the *International Society for Matrix Biology*, who sponsored three awards (the ISMB awardees are pictured at left with Liliana Schaefer, past ASMB councilor and current president of ISMB).



That leaves eight awards, and all of these come directly from ASMB. Travel Award eligibility is one of the benefits of ASMB membership, and the awards are funded by ASMB membership dollars. Six of our recipients are pictured with ASMB president Joanne Murphy-Ullrich (below).



Watch for more travel awards to the fibroblast and basement membrane workshops coming in the summer of 2019.

Matrix Interactions

ASMB News and Announcements in Brief

Election Results



Jeff Miner

has been elected as the newest President-Elect of the ASMB. The foremost duty of our new President-Elect will be to organize the upcoming 2020 Biennial ASMB meeting. Dr. Miner will work with incoming president Lynn Sakai, incoming Past-President Joanne Murphy-Ullrich, and the greater council.



Please also join ASMB in congratulating

Ashley Brown, Rachel Lennon,

and

Andrea Page-McCaw,

who will serve terms as ASMB councilors from January of 2018 until December of 2022. In addition, we need to pass along...



Many Thanks to our Outgoing Council Members

The ASMB council members completing their term of service in 2018 are:

Suneel Apte (Past President), **Adam Engler**, **Chris Overall**, and **Michelle Tallquist**.

Thank you for your service to ASMB.

Upcoming Events

May 2-7, 2019

FEBS Advanced Lecture Course
Matrix pathobiology, signaling and molecular targets
Porto Heli, Greece
mpst2019.febsevents.org

May 5-9, 2019

Gordon Research Conference
Fibronectin and Related Proteins
Luca, Italy
<https://www.grc.org/fibronectin-integrins-and-related-molecules-grs-conference/2019/>

June 23-25, 2019

ASMB Workshop:
Fibroblasts: the Arbiters of Matrix Remodeling
University of Virginia
Charlottesville, VA
<https://www.ASMB.net>

July 10-12, 2019

ASMB Workshop:
Basement Membranes
Vanderbilt University Medical Center
Nashville, TN
<https://www.ASMB.net>

July 14-19, 2019

FASEB Meeting:
Matricellular Proteins in Tissue Remodeling and Inflammation
The Lisbon Marriott, Lisbon, Portugal
Manchester,
<https://src.faseb.org/matricellular-proteins>

10th INTERNATIONAL WORKSHOP ON THE CCN FAMILY OF GENES: NIAGARA FALLS, CANADA MARRIOTT FALLS VIEW HOTEL

October 21-24 2019

The role of the microenvironment in development, homeostasis and pathology is being increasingly appreciated. The CCN family of matricellular proteins are associated with the extracellular matrix and have profound effects in fibrotic disorders, cancer, diabetes, angiogenesis and neurological disease. Therapies targeting CCN proteins are in clinical development. The international Workshop on the CCN family of genes will welcome Janusz Rak, Peter Quesenberry and Lynne Postovit at Niagara for a special session on "Extracellular Vesicles and Cancer"

The 10th international workshop will also be the occasion to celebrate Professor **Cynthia Kenyon** as the 7th recipient of the ICCNS-SPRINGER award. We are honored to welcome professor Kenyon whose seminal contribution to the field of aging has been instrumental to the understanding of molecular processes responsible for aging-related processes.

<https://www.ehlers-danlos.com/2018-eds-ghent/>

An Interview with Dirk Hubmacher

Dirk Humacher is an assistant professor at the Icahn School of Medicine at Mount Sinai Medical School, and one of the ASMB councilors that began his term in 2018. Though busy with a recently growing family, Dirk agreed to an interview with the *Matrix Letter*.



ML: Dirk, after you completed your PhD studies in Germany, you trained in Dieter Reihardt's lab in Quebec and then with Suneel Apte (a past president of ASMB) in Ohio. What was the transition like, coming from Europe to Canada to the US?

DH: I started in Dieter's lab already in Germany, just before he moved to Canada, which was very helpful to get adjusted to the way he runs his lab. I wanted to spend some time abroad and Montreal was a great, unplanned opportunity. The transition to Montreal was not too difficult, since working in a basic science lab is pretty similar anywhere in the world. The same pipettes, the same centrifuges, the same protocols... However, I learned a lot through the cultural and scientific diversity of my colleagues in the lab and the department and I enjoyed the city of Montreal and Quebec with all of its perks.

Cleveland, again, came as an opportunity that I took. A few years prior, I met Suneel during an invited visit to the Cleveland Clinic to presents my work on homocysteine. I distinctly remember the drive up Carnegie Avenue in Cleveland and thinking that I could never live in such a city. But then Suneel gave me a great opportunity to learn mouse genetics and all there is to know on the fascinating world of ADAMTS protease and ADAMTS-like proteins. I got married just before I went to Cleveland. We rented a truck, packed up my belongings in Montreal, drove to Toronto, pack up my wife's apartment, and then drove via London and Detroit to Cleveland, just trailing a major snowstorm by a day. The transition to Cleveland was a bit more of an unexpected "culture shock". I did not expect to see the consequences of the economic crisis in the US as directly as we did. We got a much more immediate feel of income and the other associated disparities.

These disparities are much less obvious in Canada or Germany. However, Suneel's lab at the Cleveland Clinic was a great place to work and the right environment for me to grow and get where I am now. Over the years, my family and I got to like Cleveland and we think that the experience of living in the Midwest for a few years broadened our horizon substantially. Now, moving to the East Coast, we find it is again a different entity in and of itself. Maybe that reflects on the large diversity of places, people, and ideas within the US.

ML: I noticed that you studied iron metabolism in Archaea during your Ph.D.? That's quite far from extracellular matrix biology. Why did you switch?

DH: *Archaea* are a fascinating group of bacteria. I worked with *Halobacteria*, which grow in saturated salt solutions. At the end of my Ph.D., I asked myself what would be the next hottest thing to study in Archaea: I came up with two areas: pathogenic Archaea, which I don't think are discovered as of yet or Archaea in the context of astrobiology or extraterrestrial life, which seemed to be out of reach. With that in mind, I decided that I would like to learn eukaryotic cell biology and work on a disease relevant topic. Dieter gave me that opportunity to try out fibrillin research in his lab in Germany and then I followed him to Montreal with a fellowship from the German Academic Exchange Service studying homocysteine modification of fibrillin microfibrils.

ML: Was the general approach to science, and to matrix biology, the same?

DH: That is a difficult question. I think the approach to science was generally the same.

However, the organization of the Ph.D. and postdoctoral programs was much more advanced and established in the US or in Canada. When I did my Ph.D. in Germany, Ph.D. programs were generally shorter, about 3-4 years, with one publication needed. Also, we did not have extensive career development sessions or advice during my undergraduate and graduate studies.

One piece of advice from my plant biology professor was to finish a Ph.D. in Germany and then go to the US and try to get a postdoc position in one of the big research institutions. Looking back...McGill, Cleveland Clinic, now Icahn School of Medicine at Mt. Sinai...I guess you could say I followed that advice.

ML: What strengths did you take with you from the labs in Montreal and then Cleveland?

DH: On a scientific level, I learned ECM biology, protein biochemistry, and cell biology in Montreal and added mouse genetics, protease biology and even more cell biology in Cleveland. In both labs, I was able to expand my skills in mentoring students on different levels and I developed my cultural competency in interactions and collaborations with many great colleagues from all over the world. I also experienced how essential mentors are, especially during rough patches of the career. From that, I aspire to be as good a mentor to my students as Dieter and Suneel were - and importantly, still are- to me.

ML: So now, you are almost a year into your position at the Icahn School of Medicine in New York. Have there been any challenges settling in?

DH: The usual hick-ups I would think. The mouse colony is still not fully set-up; the minor renovations took a bit longer than expected, but the lab turned out to be very nicely set up. A big challenge was that my family stayed in Cleveland until June. That meant commuting on a weekly basis from New York to Cleveland. We were lucky with the weather. I think only one flight was delayed for an entire day. On the upside, I started recruiting when I was still in Cleveland and I was lucky to recruit an excellent and highly motivated team of two post-docs, a research associate, and, most recently, a master student. That means that within about half a year, the lab was equipped and we started doing experiments. Right now, I feel that we are in a "steady-state" of productivity.

ML: You mentioned family. Tell us a little bit more about how you approach work-life balance.

DH: My wife and I have two kids: a 2-year-old boy and a 2-month old girl. It is stressful at the moment, but the energy we get out of them is priceless. I recently went to a career development seminar. One speaker said that talking about "work-life balance" is not helpful, because it suggests that such a balance does, or could, exist. The speaker proposed, and I agree, that it should be called "work-life integration", which may be closer to the truth. We have daycare and pediatricians close by and I can plan my time with great flexibility.

ML: What is your feeling about the perception of science by the New York public. Are you able to engage the public for help with funding, or just to get your research 'out there'?

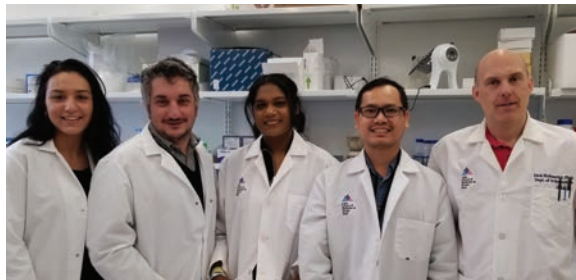
DH: That question is probably a bit early to answer for me, since I still feel I am settling in and I need to find out possible avenues to do this. I would like to engage in outreach programs for students from disadvantaged backgrounds. We had such a program in Cleveland and I participated a couple of times and I served as judge on science fairs from some of the charter schools. I also was very inspired, as probably all of us were, by the talk from ISMB awardee Billy Hudson at the recent ASMB meeting and the Aspirnaut program he set-up. Amazing! In the past, I presented at a patient advocacy group for Marfan syndrome in Detroit and participated in a Glaucoma

Think Tank here in New York. I would like to do more of that.

ML: Research that touches on fibrillins may get many people thinking about Marfan syndrome. But you work with ADAMTS proteins as well. This includes an expanded range of syndromes, right?

DH: That is correct. Most of the more than 1800 mutations in fibrillin-1 (FBN1) cause Marfan syndrome. However, a small number of clustered mutations in the FBN1 gene cause acromelic dysplasias, such as Weill-Marchesani syndrome, geleophysic dysplasia or acromicric dysplasia. Some of these disorders are phenocopied by mutations in ADAMTS10, ADAMTS17, and ADAMTS-like 2. The suggestion from human genetics is that these ADAMTS proteins work together with fibrillin-1 in specific tissues.

The framework we are working under is that fibrillin microfibrils serve as scaffold for many ECM proteins in many tissues. However, the tissue-specific functions of these microfibrils is determined by the specific set of proteins that use these microfibrils as a scaffold at a given time, in a given tissue, and thus confer the tissue-specific functions. Another fascinating aspect about these mutations in FBN1 is that the phenotypes of acromelic dysplasias are so different. They are pretty much the opposite of Marfan syndrome. How mutations in the same protein cause these diverse phenotypes is a fascinating question.



Hubmacher lab, at Icahn.

ML: Since your lab is a bit new, you might not yet have that many graduate students. But, let's imagine you were recruiting a young scientist interested in studying ADAMTS proteins. What would you say to them are going to be the most interesting areas for the next few years?

DH: I think the most interesting areas in ADAMTS research is the quest to identify the respective substrates for these proteases, and to further define the biological consequences of substrate proteolysis. Do ADAMTS proteases have anabolic functions in ECM formation and remodeling? Or catabolic functions in ECM degradation or removal, either during development or in pathological situations? Are ADAMTS proteases part of larger networks of protease that activate or inactivate each other?

Discovering new substrates could also reveal potential novel roles for bioactive peptides generated by these proteases. Given the genetic connections of fibrillin with ADAMTS proteases and ADAMTS-like proteins, it will be interesting to define the protein networks that they form. On the fibrillin side, I am interested in looking into the early steps of fibrillin microfibril formation, which includes the secretion of such a large molecule and the initial steps of deposition on fibronectin. How is that coordinated at the level of the cell surface?

ML: Thank you, for talking with us, Dirk. It was a pleasure.

ASMB Outstanding Senior Investigator Award



Jean Schwarzbauer is the 2018 recipient of the ASMB senior investigator Award. The senior investigator award was the first award established by ASMB, and recognizes those investigators that have made seminal contributions over their lifetime to the study of the ECM. Dr. Schwarzbauer is the current Eugene Higgins Professor of

Molecular Biology at Princeton University, and has, over her scientific career, played key roles into our understanding of extracellular matrix protein interaction with integrins. In particular, it was her group that discovered the mechanisms by which fibronectin, an essential vertebrate protein, is secreted and assembled into fibrils on the cell surface. Dr. Schwarzbauer's path to Princeton began with a graduate degree from the University of Wisconsin in Gary Craven's group studying protein-nucleotide interactions. A post-doctoral fellowship at MIT with Richard Hynes cemented her solidly in the field of protein-protein interaction and the extracellular matrix. Dr. Schwarzbauer's expertise has been accessed through her service as an editor, reviewer and via her leadership roles on numerous boards and panels. A past president and constant contributor to the American Society for Matrix Biology, she has also served as the Secretary of the American Society for Cell Biology.

ASMB 2018 Award Winners



Both ASMB, ISMB Recognize Naba with Junior Investigator Awards

2018 was a year of much recognition for ASMB councilor Dr. **Alexandra Naba**, an Assistant Professor of Physiology and Biophysics at the University of Illinois. Naba's achievements in the proteomics of the extracellular matrix were recognized by the ASMB with its Junior Investigator award, and by the ISMB with its Rupert Timpl Award this past July. Dr. Naba is shown here celebrating the awards with Zen-like contemplation at the edge of the Grand Canyon.



Iozzo Award Winner, 2018



The Renato Iozzo Award for Outstanding Research in Matrix Biology was established in 2014 thanks to a most generous endowment to ASMB from the former ASMB and ISMB President Renato Iozzo. Dr. Iozzo is pictured at left with this year's awardee,

Rachel Lennon.

Dr. Lennon is a physician scientist who specializes in nephrology and the extracellular matrix of the kidney. Rachel is Professor of Nephrology and Wellcome Senior Research Fellow in Clinical Science at the University of Manchester, U.K. Her research focuses on understanding mechanisms of glomerular disease. At the 2018 ASMB biennial conference in Las Vegas Rachel's presentation described the role of the ECM in the glomerular filtration barrier formation, maintenance and its alterations in disease.

The Iozzo Award is given to a mid-career investigator, 5-15 years from their first faculty or equivalent appointment. The award distinguishes the qualifications of the awardee from the recipients of the current Junior and Senior Investigator Awards.

The ASMB Nominating Committee, chaired by the Past President, makes the final selection among candidates, subject to the approval of the ASMB council.

Award nominations must originate from ASMB members and be accompanied by a complete CV and at least three letters of support, including one from an ASMB sponsor. The awardee is invited to speak at the biennial meeting and presented with a plaque, an honorarium and conference registration. Complete details are available at asmb.net.



ISMB Distinguished Investigator Awardee, 2018



The ISMB honoree this year was **Billy Hudson** of Vanderbilt University, who presented a lifetime of work to a packed plenary session at Red Rock.

Professor Hudson touched on the molecular and evolutionary aspects of type IV collagens. The work presented was, at times, broad in nature, tracing back to the beginning of metazoans, yet sometimes very focused, right down to unique and previously unappreciated contributions by ions and resulting unique bond chemistries in the collagen knot hexamer. Dr. Hudson also used the platform to discuss his Aspirnauts program, and to address the impact that science, as well as organized science programs, can have in influencing the lives of children who have suffered adverse childhood experiences. ASMB joins ISMB in celebrating the scientific achievement of Dr. Hudson and in recognizing a level of social responsibility we should all strive towards. <https://www.aspirnaut.org>

ASMB Founders Award

Vincent Fiore (left) is the inaugural winner of the ASMB's newest prize, The Founder's Award. The ASMB Founders Award was created to honor the individuals whose efforts led to the establishment of the Society. It recognizes the highest level of scientific excellence in extracellular matrix and cell-matrix interactions in young scientists in transition toward their first independent career positions, and who have demonstrated a commitment to a career in matrix research and the activities of the ASMB. Applicants are ASMB members who are scientists in training, who have not yet received a fully-independent faculty appointment, and who are within 7 years of award of their doctoral degree. The selection process was highly competitive. We congratulate Dr. Fiore as the first of a new line of ASMB Awardees. One Founders award will be presented at each Biennial Meeting.

SCIENTIFIC PRESENTATION: SHOULD WE LET IT SLIDE? EDITORIAL

According to almost any movie made between 1930 and 1960, editors are old, grumpy and absolutely demanding of adherence to strict standards set by tradition. They frequently set unreasonable goals. The poor protagonists of these films (or anyone, really) cannot hope to reasonably attain them. So please take this *editorial world view* into account as I relate to you something I noticed during the last ASMB meeting.

The speakers were terrific. I think we must admit, however, that the slides were frequently not that terrific. The surprising thing was that there was no pattern to predict which talks might contain the deficient slides. They appeared in talks from young investigators and from the most seasoned of presenters. This makes one wonder if we are putting the required thought into the purpose of our presentation. I would posit that less thought is going into slides than there was in the past, and I think we can all benefit if we can reverse this trend.

There is a historic perspective here. It may surprise many readers to learn that there was once a time when "slides" were not individual pages in an electronic file, but rather were individual units of film and cardboard or plastic. In the era before Powerpoint, and even into the days of transition towards our current powerpoint-dominant presentation culture, these individual slides lived in plastic sleeves, to be assembled based on the strategy of the presenter for the particular seminar they were delivering. As a result, the slides were often multipurpose, and could support talks on different but related topics from a given laboratory. Collaborators would "borrow" slides from each other for talks in the most literal sense.

The practical reality of that system was that these slides were minimalist and multipurpose. Since they took both time and money to create, and could not be fixed with a simple click, each slide received significant thought as to things like clarity. Many institutes also had graphics departments that helped with design. In those days, scientific meetings always had rooms where you physically loaded slides into a rack, then quickly ran through them to make certain you had done it correctly.

Then, PowerPoint arrived. It was revolutionary, although the conversion to computer-based presentations did not occur overnight. While all investigators immediately recognized the benefits that powerpoint offered, and appreciated the ability to make on-the-fly modifications to presentations, there was a problem. Many successful and well-established investigators had vast libraries of physical slides, and the conversion of these slides to the digital format required some combination of time, money and the temporary loss of those slides. It took a bit of time, but the advantages of making your slides quickly, precisely, and with professional results served as the death knell for physical slides. Striking improvements in LED projection made the old slides seem dim and archaic.

This brings us to today, somewhere in the third decade of digital slides. I think we've forgotten some of the lessons learned in those early days. There is an art to presentation that includes everything from practicing the timing of a talk to choosing color combinations that will not strain the audience's eyes. The entire complement of these considerations falls outside the focus of this column, and probably outside this editor's expertise. Yet, I think many of us can improve our presentations with just a couple basic changes.

For a slide to have the most impact, keep it as simple as you reasonably can. I've done a bit of research. Aside from a very slight increase in file size, there is no additional cost for breaking one very complex slide into two (or more) easier to digest slides. While some might worry about overall slide counts, there are no longer physical slides. Slide count is now essentially an artificial number. Scientific presentations are timed, not limited by number of slides presented. Is it time-saving to have a complicated slide to explain rather than two simpler slides?



As a second point, it helps to revisit the text-based components of each slide to ensure that they are rapidly understandable. A huge bar graph with tiny text along each axis is not always easily understood, even if the speaker explains it well. On the other hand, a small graph with a larger font size axis label can quickly convey an entire concept. To decide how large of a font is required for slide, one must consider the size of the room that the presentation will occur in. Big rooms require big text. I wouldn't trust the program default settings for my presentations. After all, PowerPoint has no idea what I am going to do.

POSITIONS AVAILABLE

Postdoctoral Position

Ramirez Laboratory

Icahn School of Medicine

One post-Doctoral research fellow or Senior Scientist positions are immediately available in the Ramirez Lab at the Icahn School of Medicine at Mount Sinai (NYC) for highly motivated candidates. The position is to characterize the mechanisms whereby fibrillin molecules expressed in tendon and perichondrium regulate postnatal bone growth. We have a strong interest in cell-matrix interactions, stem cell biology, TGF β signaling and mechanobiology. The work will take advantage of a repertoire of genetically modified mice a wide range of physiological, histological and cellular and molecular biologic techniques, and computational and systems biology approaches.

QUALIFICATIONS: • Experience with biochemistry, cell and molecular biology is required. • Experience working with mice is highly desirable. • Experience in vascular or bone biology is desirable but not required. • The applicants should be self-motivated and have strong professional communication skills. • The positions are open for visa holder only. • Salary will be based on qualifications and years of experience. Qualified candidates should apply by sending a cover letter, CV and the names of three references to:

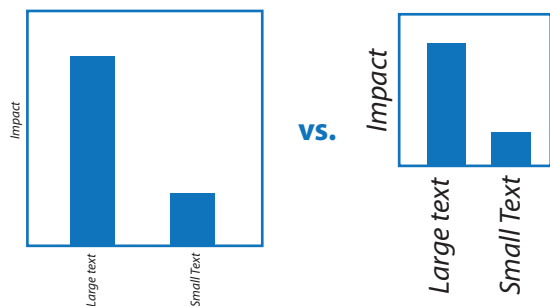
Francesco Ramirez, PhD (Francesco.ramirez@mssm.edu)

Icahn School of Medicine at Mount Sinai

1468 Madison Avenue, Box 1603

EDITORIAL, CON'T

In fact, bar graphs are so universally recognized that one can actually use a larger font to convey your message while using less of the slide. I gave it a try.



So why do we not do this? Sometimes, we present in a room that is very different than we originally thought, or planned for. More often, however, I suspect that the problem is time. Rather, it is a lack of time in our schedule that is **the** major reason (*I am certainly guilty*) we don't pay more attention to our slides, and modify them as needed.

But we should. Those at the back of the room may not be able to hear your lecture clearly. Our audience is global. Everyone cannot follow English at the same pace, and visual cues are very important if we want to communicate our message. And we should definitely want this. In the end, science suffers if it is not communicated well. *dgs.*

ASMB TO HOLD TWO WORKSHOPS IN 2019

Following up on the success of the 2017 workshop in Nashville, ASMB has elected to sponsor two meetings in 2019. The newest meeting, to be hosted on the campus of UVA in Charlottesville, will focus on the roles of the fibroblasts in ECM assembly and remodeling. This workshop will join the second Basement Membrane workshop, which will again be held in Nashville, at Vanderbilt University. While the subjects are quite distinct, the meetings are staggered to allow ASMB members to attend both. Workshops provide a different and informal meeting experience for ASMB members. They bridge the non-biennial meeting years when ASMB members may have less contact. And they have been, so far, very successful. Expanding to more than two meetings in future years seems to be a real possibility.

The Matrix Letter

ASMB ASMB Workshop 2019 on
Basement Membranes
July 10-12, 2019

Vanderbilt University Medical Center, Nashville, TN

Co-Chairs: Roy Zent and Jeffery Miner

VANDERBILT UNIVERSITY
MEDICAL CENTER



ASMB Workshop 2019

Fibroblasts: the Arbiters of Matrix Remodeling

June 23 - 25, 2019

University of Virginia
Charlottesville, VA USA

CO-CHAIRS: TOM BARKER AND MERRY LINDSEY



Post-doctoral Position Gould Lab UCSF School of Medicine

The Gould lab of the UCSF School of Medicine is seeking a Postdoctoral Fellow who will lead an NIH-funded project to understand the molecular mechanisms by which the extracellular matrix controls angiogenesis. The goal of the project is to identify and characterize the biological functions of type IV collagen and other extracellular matrix molecules with an emphasis on cerebrovascular development. Candidates must be enthusiastic, passionate and self-motivated with a commitment to career development. You will have the support of an organized Departmental Postdoctoral training program including opportunities to present your work and bi-annual review of a personalized Individual Development Plan with your primary mentor and a co-mentor to ensure that you are meeting career goals. Supplemental salary support is available and you will be expected to compete for external fellowships and independent funding during the training period. The candidate must be able to independently and efficiently manage concurrent projects and while possessing a strong commitment to contributing intellectually and interpersonally toward a positive and stimulating lab environment. A Ph.D. or M.D. degree and excellent verbal and written communication skills are required.

Extensive experience in molecular, cell and vascular biology are all desired. Interested applicants should send a single PDF file including: Cover letter (please state how you heard about the position) * CV demonstrating publication of impactful work * One-page statement of research interests * Contact information for three references

Applicant should send their CV and a list of 3 references to

thegouldlab@gmail.com

UCSF is an equal opportunity employer. Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status.

Post-doctoral Position in Kidney Matrix Biology at Vanderbilt University Medical Center

A postdoctoral fellowship is available in the laboratory of Dr. Ambra Pozzi in the Division of Nephrology at Vanderbilt University School of medicine. The goal of our research is to study the molecular and cellular mechanisms that lead to kidney fibrosis to devise more effective anti-fibrotic therapies.

We are seeking applicants holding a PhD, MD, or MD/PhD with interest in studying the role of collagen receptors in fibrotic responses. Candidates will be able to use genetically engineered mice and learn and implement mouse models of kidney injury and primary cell cultures to develop novel approaches to detect and treat fibrosis.

Applicant should send their CV and a list of 3 references to

ambra.pozzi@vumc.org

Vanderbilt University is an equal opportunity employer

Post-doctoral positions in Vascular ECM, Development and Disease at the Cleveland Clinic Lerner Research Institute

Post-doctoral fellowships are available in Suneel Apte's laboratory at the Cleveland Clinic Lerner Research Institute (LRI), Cleveland, USA. The project area will be extracellular matrix in vascular development and disease, specifically aortic aneurysm. The positions will suit recent PhDs, MD/PhDs or MDs with an interest in proteoglycans, proteases, smooth muscle cell biology, human and mouse genetics, human vascular disease and proteomics/mass spectrometry.

The Cleveland Clinic is a major clinical center for vascular disease and the LRI has an international community of scientists doing outstanding research in a variety of disciplines and research areas, with excellent core facilities and other resources.

Applicants should send their curriculum vitae, a statement of research/career goals and the contact information for three references with an intimate knowledge of their work to

aptes@ccf.org

The Cleveland Clinic is an equal opportunity employer

Publish in the Matrix Letter!

We welcome several different types of content that foster interactions among the ASMB membership.

Matrix Mini-reviews

The Matrix Mini-review feature will be a focused summary that shares the work of a particular lab in the context of the current state of knowledge in that field. Usually written by young faculty, post-doctoral fellows or even students, the minireview runs about one to two written pages, with a single scientific illustration (and possibly a lab photo), with generally less than 10 references. Its a great way to get the word out on your lab's interests when you are recruiting, too.

Matrix Essays

The purpose of a Matrix Essay is to promote a novel or breaking hypothesis in the field of Matrix biology. One expressed purpose for such an endeavor would be for garnering supporting (or detracting) evidence and collaborators from the greater ASMB membership. Like the mini-review, the Matrix essay is about one running page and may include a single illustration and up to 10 references.

Letters to the Editor

A letter to the editor should be short and succinct, and will focus on alerting the ASMB membership to recent advances or concerns in our fields and those which will closely impact us. A letter to the editor is limited to 200 words and three references.

Matrix Images

These are submissions of particular aesthetic or educational images that you are willing to share with the membership, along with a caption explaining the image. These will be openly available for distribution, with reference/credit attributed to your lab.

Matrix Facts

These articles focus on underappreciated or forgotten aspects of matrix biology. They are the perfect place for historical perspectives, and reminders of the different possible disease linkages that we have in our field (for example, vitamin C, scurvy and collagen synthesis).

Reference Format

1) Lewis R, Ravindran S, Wirthlin L, Traeger G, Fernandes RJ, McAlinden A. Disruption of the developmentally-regulated Col2a1 alternative splicing switch in a transgenic knock-in mouse model. *Matrix Biol.* 2012;31:214-26.