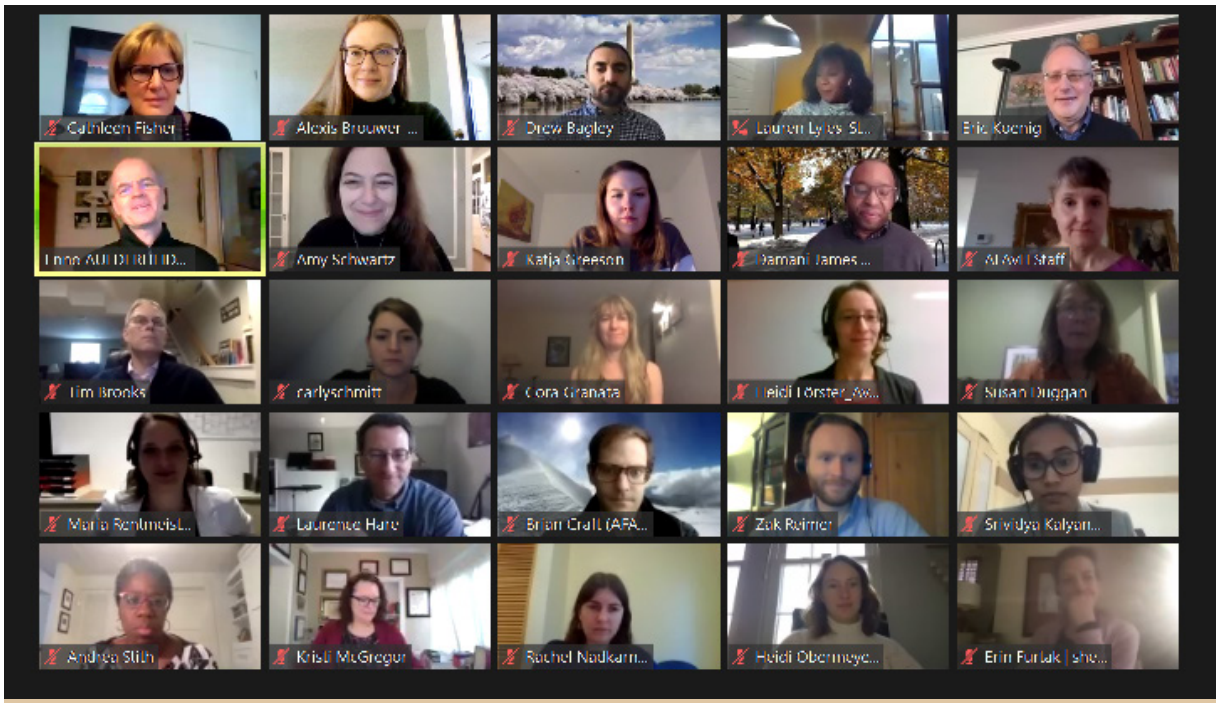
STRATA

AMERICAN FRIENDS OF THE **ALEXANDER VON HUMBOLDT FOUNDATION**



German Chancellor Fellows came together for a virtual Alumni Meeting to celebrate the program's 30th anniversary. *(Page 7)*

Inside This Issue

OUR MISSION -
To become a leading source in the United States for the promotion of national and international networking, exchange, and creative collaboration among scientists, scholars, artists, and other professionals, consistent with the goals of the Alexander von Humboldt Foundation of Germany.

OUR VISION -
To mobilize the intellectual curiosity, creativity, experience, and passion of Humboldtians to shape research, higher education, and professional development in the United States and beyond.

Message from the President

Dear Humboldtians and Friends,

2020 has been a challenging and painful year for individuals and families, institutions, our society, and nation. The loss and disruption of lives and livelihoods, a deeply divisive election, and our national failure to effectively manage the novel coronavirus pandemic have left many, including in our Humboldt alumni network, feeling overwhelmed, exhausted, and dispirited. We know that many of you have valiantly adjusted to online education, while endeavoring to sustain your research, the training of next generation scholars, and professional networks and activities in the absence of travel.

The pandemic has, however, also demonstrated the vital importance of science and of international scholarly cooperation and exchange. The emergent vaccine candidates build on collaborations and the sharing of data and scientific analyses both nationally and worldwide. While enormous challenges lie ahead, the contributions of science and scholarship to our understanding, response, and adaption to the ongoing crisis have affirmed the principles that underpin the Humboldt Foundation's mission—excellence in all disciplines and fields of endeavor, cooperation across international, disciplinary, and sectoral boundaries, and trust.

While our mission remains unchanged, we at American Friends, like everyone else, have had to adapt our operations and programs, taking inspiration from the Humboldt Foundation's quick response to COVID-19 constraints to enable, wherever possible, the research plans of its fellows and awardees. Since moving to remote operations in March, we inaugurated a Leadership Series of essays and commentary on the impact of the pandemic on research, research training and funding, and international collaboration. We are now preparing to launch a series of Humboldt Digital Dialogues—virtual events bringing together alumni and partners to discuss key issues at the science–policy–society nexus. We would welcome the contributions and participation of Humboldt alumni and other experts in these dialogues and will be sharing information on our plans shortly.

In line with our commitment to diversity, equity, and inclusion, we have begun to implement an action plan to achieve a more inclusive, equitable, and diverse alumni network and organization. Our initial efforts are aimed at encouraging talented Black scholars, scientists, and professionals to apply for the programs of the AvH and to envision a future as members of a worldwide network of excellence. We have begun modestly with personalized outreach to historically black colleges and universities (HBCUs) and professional societies but look to expand and build on these efforts to address the barriers to inclusion and participation of those of diverse races, ethnicities, identities, and beliefs. We would welcome your ideas, suggestions, and new partnerships in our efforts. To this end, we look forward to proposals from the Working Group of German Chancellor Fellows on diversity recruitment.

We continue to work on defining meaningful ways for US Humboldt Alumni to stay connected to Germany and German research, to their fellow Humboldtians, and to future Humboldtians. Our "How-To Stay Involved Guide" for alumni in academia is live on our website and details the many ways that Humboldtians at all career stages can engage with the Humboldt Alumni Network.

We also remain strongly committed to finding ways to better support the many US Humboldtians who have pursued paths of excellence outside of academia, including in business, law, medicine, public policy and administration, and the arts and culture. The latter include many of the over 300 alumni of the German Chancellor Fellowship program, which this year celebrated the 30th anniversary of the program's founding. Over the last three decades, the program has expanded to include Russia, China, India, and Brazil, with South Africa slated to send its first fellows to Germany in 2022. Although we were unable to gather in person as planned, American Friends of AvH and the AvH were proud to host a virtual alumni meeting of the German Chancellor Fellows on November 17-18th. Forty fellows joined AvH General Secretary Dr. Enno Aufderheide and Dr. Heidi Foerster to celebrate the program's evolution and envision the network's future. The program's keynote was provided by German Ambassador to the United States Emily Haber.

We will continue to adapt and evolve our engagement guides—for example, to include new digital forms of engagement and support—so that US alumni may find meaningful ways to engage and give back, including through service as mentors, talent scouts, moderators or speakers in our programs, or through charitable contributions that supplement the Foundation's support and help us build our programs and services for US Humboldt Alumni.

As we near year's end, we wish our friends and alumni good health and resilience, but also hope—in the power of science and scholarship and in international cooperation to inform and shape the policies we must undertake to address the current pandemic and its broad impact. We also look forward to contributing to a renewal in German-American relations in 2021 by supporting the often overlooked, but essential, role of bottom-up scientific, scholarly, and professional collaboration to advance knowledge, build cross-cultural understanding, and benefit society.

Cathleen S. Fisher, PhD - President

HUMBOLDTIAN DONOR STORIES

PROFESSOR BENJAMIN CHU

HONORING HIS HUMBOLDT HOSTS TO SUPPORT FUTURE RESEARCH EXCHANGE
PROFESSOR BENJAMIN CHU (USS 1976-77; 1992-93)

American Friends of AvH is grateful to individuals who have demonstrated their commitment to the Humboldt experience and ethos through major and planned gifts.

Professor Benjamin Chu, Distinguished Professor, Emeritus at Stony Brook University, made his gift on the occasion of his 88th birthday and in honor of the 80th and 88th birthdays, respectively, of his two Humboldt hosts, Professor Gerhard Wegner (80th) at the Max Planck Institute for Polymer Research in Mainz and Professor Dietrich Woermann at the University of Cologne. Professor Chu explains, "Eight is the luckiest number in Chinese culture and I very much wanted to honor the two individuals who were so gracious and took such excellent care of me and my family in Germany."

The purpose of Professor Chu's unrestricted gift is to support scholarship and exchange at the Max Planck Institute for Polymer Research in Mainz and to support scholarship and exchange in polymer physics and materials science/engineering fields at the University of Cologne or any other institution.

American Friends of AvH is grateful for his generous donation and happy to hear of the many longstanding and fruitful collaborations and friendships among our alumni and their hosts.

"I will always be thankful for the opportunity to learn not only many aspects of science in Germany but also about German culture and society."

GET INVOLVED

American Friends of AvH is committed to the lifelong engagement of Humboldtians regardless of career path, profession, or academic discipline, and across all phases of professional activity and development. In response to alumni requests, we have created a "How-To Stay Involved Guide for Academia"—a template we plan to adapt for US Humboldtians in business, law, and medicine, and for the alumni of the German Chancellor Fellowship Program.

View the How-To Guide here:

Alumni are encouraged to apply for an Alumni Council US Engagement Award. In response to the pandemic, these awards now can be used to support both in-person, virtual, and hybrid alumni events and activities. Although in-person gatherings may not be currently possible, we encourage you to think creatively to find ways to engage with other Humboldtians virtually.

Read more about the Alumni Council US Engagement Award here:

Featured Scholar

An Interview with Professor Talat S. Rahman

Talat Rahman (HFST-P, 1987; USS, 2001) is Pegasus Professor of Physics at the University of Central Florida. Her research and teaching interests include theoretical and computational modeling of materials with particular interest in understanding the mechanisms that control epitaxial growth and morphological evolution, optical and magnetic properties, and chemical reactions in complex nanoscale environments. American Friends of AvH had the opportunity to speak with her about her Humboldt experience, research, and personal projects earlier this year.

AFAvH: Tell us about your experience as a Humboldt Research Awardee.

Talat Rahman: I have been fortunate to have had two research awards from the Humboldt Foundation: the Humboldt Research Fellowship for postdoctoral researchers in 1987 and the Senior Research Prize in 2001. Those awards have helped me initiate and maintain strong research ties with colleagues in Germany, which have led to many successful projects and conferences, student exchanges, and joint scientific publications. Several of my collaborations continue to this day. The first fellowship was instrumental in helping me shape my research directions, as I was a junior faculty member at Kansas State University at the time. As a theoretical/computational surface physicist, I benefitted a good deal from discussions and early access to experimental data, particularly in the area of vibrations of atoms and molecules at surfaces, the bulk of which was being carried out in Germany. It was a pleasure to work with Professors Ibach's and Comsa's research groups in Juelich and Peter Toennies' in Goettingen. Scanning tunneling microscopy (STM) had just been invented in Switzerland, and its repercussions could be felt in the labs in Germany in which I was working. It was an exciting time to be in Germany. The 3-week tour through Germany offered to me and my fellow Humboldtians also helped me immerse myself in the German language, culture, and people.

"Making things better for those who are less fortunate has been an essential part of the mission of the Humboldt Foundation and I am so glad to be part of that family."

The Senior Humboldt Award was really the icing on the cake for my research. I was able to extend my interactions with Proffesors Ertl's and Freund's groups at the Fritz Haber Institute in Berlin. My visits to FHI continued every summer until 2008. In the summer of 2009, I was invited by Proffesor Kern to the Max Planck Institute in Stuttgart. This was not an accident as I had collaborated with Professor Kern earlier when he was working on his PhD under Prof. Comsa. My visits to Stuttgart have continued on a regular basis. My visits to Stuttgart have continued on a regular basis. I have also started interactions with Professor Morgenstern in Bochum, whom I had also gotten to know in my earlier visits to Juelich.

In short, I consider myself a part of the German scientific community and owe a debt of gratitude to my colleagues, who welcomed me with open arms and gave me countless opportunities for collaborations.

AFAvH: How did you first become interested in nanoscience? What, if any, barriers to success in the nanoscience field did you experience due to your gender?

TR: Nanoscience is a child of surface science. As a surface scientist, I was working on systems at the nanoscale even before the word nanoscience was coined. The nanoscience initiative allowed me to broaden my scientific horizons. Instead of confining investigations to very clean, periodic systems in ultra-high vacuum (UHV) for very controlled systematic studies, nanoscience demanded examination of structures that were more complex and under ambient conditions. It was only natural for me (and for other surface scientists) to extend research inquiry to this more fascinating and challenging area that is much more heterogeneous than the periodic simplicity of a surface. The move has paid off, as nanoscience makes us work at the cutting edge of fundamental science and its technological applications. It is even more interdisciplinary than surface science but benefits from the foundations laid by surface science, a good bit of which took place in Germany.

Regarding barriers to success as a female, my case is no different from that of other females, particularly from my generation. There were remarkable hurdles that could have derailed my professional career; however, my immediate circumstances (mentors, family, an understanding spouse, and a network of sympathetic friends and colleagues) made success possible. The message is that success can be achieved if there is a supportive environment that helps overcome all barriers.

AFAvH: Please tell us about your work establishing UCF as a PhysTEC site and how that work has impacted higher education in the Orlando region.

TR: I believe establishing the PhysTEC[1] site at UCF has had a large number of implications for the UCF Physics Department and for our relationship with the Greater Orlando K-12 system. The PhysTEC program, which is aimed at increasing the number of physics teachers in high schools (when the program started around 2009 only 29% of high school physics teachers had a degree in physics or a related discipline; the number is now almost 50% after ten years of PhysTEC nationwide), requires sites to commit to a few effective practices. The following are four practices that have had a positive impact: 1) engaging a teacher-in-residence in the department; 2) implementing evidence-based teaching strategies; 3) a learning assistant (LA) program; 4) collaboration with K-12 teachers. The first three have helped us not just enhance our teaching skills and pedagogy, but also to change the culture of the department which, in my view, is inclusive and student-centered. The third and the fourth have helped us create regular programs that bring our LAs in direct contact with local schools for lesson planning and extended outreach (both ways). Our LAs benefit also from the mentoring that they get from our K-12 partners. Peer mentoring, which lies at the heart of the LA program, has been very effective in getting students in our introductory physics courses more engaged in the subject. It also helped with the professional development and teaching skills of our LAs.

AFAvH: Could you share a few career highlights?

TR: This is a difficult question to answer, but let me just mention a few things that come to mind right away, beyond the joy of having the opportunity to mentor some excellent graduate and undergraduate students and junior researchers and seeing them take off as professionals in their own right. That is the ultimate dream of any academic. I have also been very fortunate to have been the first woman to be hired in a tenure track position at Kansas State University, where I also served as its Faculty Senate president and in that capacity was able to facilitate an equity study to address unequal employment conditions for faculty and administrators across the Kansas Regents Universities (6 of them). That experience was beneficial in helping me facilitate some structural and programmatic changes in the Department of Physics at the University of Central Florida in my almost 10-year term there as the first female chair.

One of the programs that I am very proud of is the Bridge Program of the American Physical Society, which we instituted in 2015 and which has helped us increase the number of graduate students from underrepresented minority groups by about 20% in 6 years. The number of female students and faculty members has also increased substantially in the past decade. Another program that I would like to promote further is a science activities center in Karachi, Pakistan, that aims to engage students from underprivileged backgrounds in hands-on science activities. There is still a lot to be done, but the center is already off to a good start, thanks to the dedication of my colleagues from the Center for Physics Education in Karachi.

This brings me back to the Humboldt Foundation and the theme of my lecture there in 2001—how individuals such as myself who have benefitted from so many opportunities could work together to give back to where we came from. Making things better for those who are less fortunate has been an essential part of the mission of the Humboldt Foundation, and I am so glad to be part of that family.

Talat Rahman with graduate physics students as part of the American Physical Society Bridge Program (APS-BP), an effort to increase the number of physics PhDs awarded to underrepresented minority (URM) students.

[1] PhysTEC promotes the education of exemplary high school physics teachers in response to a critical national shortage. Member universities across the country receive guidance and resources to transform their physics teacher training programs into models that increase diversity and inclusion, student retention, and graduation rates of aspiring physics teachers.

DONOR HONOR ROLL *January 1, 2019 - December 31, 2019*

$1000 and over

Anthony Arduengo III
Daniel Fallon
Cathleen Fisher and Banning Garrett
Charles Goodman
Myles W. Jackson
Eric Koenig and Amy Schwartz
Mark Edward Lewis
Elisabeth Malsch
Michael Modest
Terry Paul Pinkard
Doraiswami Ramkrishna
Hal Varian
Sidney and Nenita Yip Charitable Foundation
Theodore Ziolkowski

$500 - $999

Hannah Luise Buxbaum
Christiane Fellbaum and Elliott Lieb
Karl Galinsky
Richard Terrence Gray and Sabine Wilke
Richard Haglund
Zackary Johnson
Gary Koopmann
Steven Mansbach
Gale A. Mattox
Robert McMeeking
Joseph Nibler
Roberta L. Rudnick
Joseph Seto

$250 - $499

Frank Adrian
Joseph Cerny
E. William Colglazier
Dennis Diestler
Peter Drescher
Evgeni Fedorovich
Uwe Fink
Edwin R. Fuller Jr.
Joseph Patrick Henry
Nolan Holland*
Kendall Houk
Robert Huggins
Peter F.M. Koehler
Samuel Krimm
Jaan Laane
Anthony McHugh
Dale Medearis
Arnim Meyburg
Hans Othmer
Jeffrey Peck
Robert Eric Ricklefs
Ralph Simmons
Rainer Storb
Lu Ting
Charles Home Trautmann
James and Hildegard Vary
Richard Jay Wallace

Up to $249

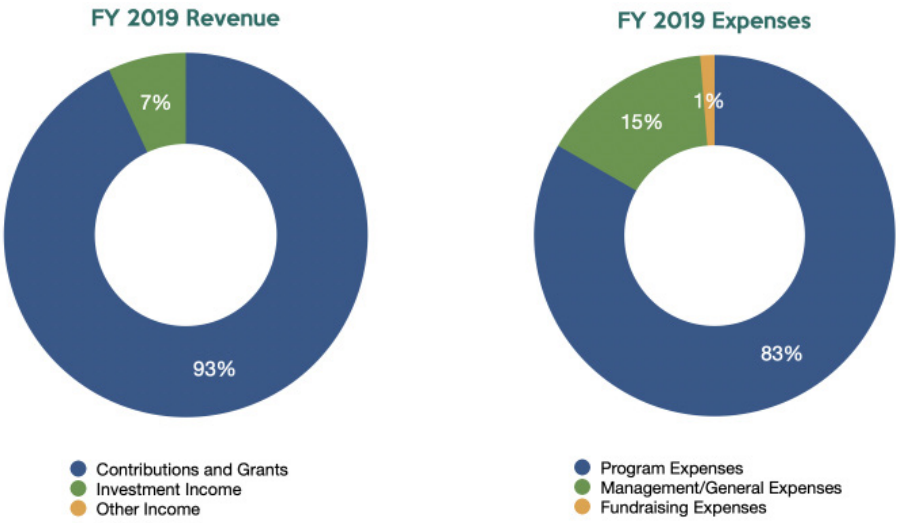
Ulrike Albrecht
Silas James Allen Jr.
Katrin Amian
Michael D. Bailey
Paul Balmer
Frank Baron
Peter Bedrossian
Kenneth Behannon
Eugene Benton
Alan R. Bishop
Roger David Blandford
Elliott Block
Alexander Blokh
Hinrich Bohn*
Nicholas Bottka
Kathleen Weil-Garris Brandt
Timothy Brooks
Carol Bruch
Martin J. Bukovac
Theodore Burkhardt
Martin Camargo
Ralph Chamberlin
James Hamilton Charlesworth
Gregory Cherlin
Brian John Clifton*
Kathleen Coleman
Peter Collings
Dan Coman
Manuel Covarrubias-Robles
Jack Cowan*
William A. Cramer
A. Stephen Dahms
Gholamreza Dargahi-Noubary
Louise K. Davidson-Schmich
Howard Day
Temd Deason
Alan DeSilva
Karen Donfried and Alan Untereiner
Michael P. Doyle
Theodore L. Einstein
Robert Lee Ellis
Thomas Engel
Lynn Erbe
Vincent Ervin
Robert W. Field
Heinz Floss
Robert Forster II
Joseph and Priya Francisco
Theodore Gamelin
Geoffrey Giles
Paul Goldberg
Robert B. Griffiths
William Hay
John Patrick Hayes
Eric Herbst
Larry Hickman
Allen Hjelmfelt
Peter Kahn
George Kenagy
Wolfgang Ketterle
John Kovar
Manfred Krause
Eric Kurlander*
John Kutzbach
David P. Landau
Kevin V. Lemley
Heikki Lempa
Abraham Lenhoff
Jason A. Lillegraven
Robert Louden
Charles S. Maier
Stanley Manatt
Rudolph Marcus
James Markham
Kristi Stahnke McGregor
Carmelo Mesa-Lago
Harold Metcalf
David A. Micha
James and Kathleen Milch
Thomas H. Nash III
Jay A. Nelson
Ronald Owen Nelson
Stephen Nichols*
Carl Niekamp
Gbekeloluwa Oguntimein
James Olcese
Ilonka Oszvald
John H. Perepezko
André Platzer
Arthur Poskanzer
John Priscu
Peter Hugh Quail
Mark W. Rectanus
Thomas William Reps
Malcolm Richardson
Hans Ritter
Robby Robson
Anthony Gregg Roeber
James Rovnyak
David Warren Sabean
Joseph W. Sanger
William Saul
Michael Schick
David Schoenbaum*
John Paul Selegue
Jeffrey Sherman
Henry J. Shine
Jean'ne M. Shreeve
Niall W. Slater
Randall Snurr
William R. Stanley
State Street Matching Gift Program
Holly Stein
Herbert Steiner
Frank Stern
Sven Treitel
John Tully
Noel Urban
James Vignos
Wolfgang Vogel
Roger Vogler
Matthias Vorwerk
Richard Walker
Anke Walter
David Wellbery*
Frank Welsch and Brigitte Philipp
John Simon Werner
Jerry Whitten
Robert E. Wilson
Christiane Wobus
Christoph Wolff
Joe Wong
Michael Wright
Bernadette Zamora
Royce Zia
Anonymous

**Denotes individuals who made multiple contributions in 2019*

GERMAN CHANCELLOR FELLOWS COME TOGETHER FOR FIRST-EVER VIRTUAL ALUMNI MEETING

On November 17th-18th, AFAvH hosted the first-ever virtual alumni meeting of US Chancellor Fellows to commemorate the 30th anniversary of the program. AvH Secretary General Dr. Enno Aufderheide gave the opening address, which also featured BUKA program updates from Program Director Dr. Heidi Foerster and remarks and a Q&A session with German Ambassador to the United States Dr. Emily Haber. In several interactive sessions, fellows from different generations of the program reflected on the impact of their experience and their vision for the network's future. Participants agreed to form three working groups to develop proposals for diversity recruitment, the creation of affinity groups to link BUKAs and other Humboldtians, and networking and communications tools. Over 40 alumni attended the meeting on both days, and we look forward to the rescheduled in-person US Alumni Meeting, now set to take place from October 29th to 31st, 2021 in Arlington, VA. This meeting will likely be a hybrid format, with virtual and in-person components and will include fellows from Russia, China, Brazil, and India.

Audited Revenue & Expenses - FY 2019 $1.0 M Budget



GET INVOLVED: EVENTS & INITIATIVES

AFAvH will launch a series of Humboldt Digital Dialogues in early 2021 to examine "Society, Science, and Policy in the (Un)United States and Globally: Lessons from the Coronavirus Pandemic." The series of one-hour dialogues will seek to provide nuanced analysis and comparative perspectives on the changing cultural and societal context of science and its implications for the functioning of science advisory systems and international scientific and scholarly collaboration. The Dialogues in this three-part series will feature short statements by two speakers followed by a moderated discussion. Part I will explore societal factors such as political culture; identity and party politics; demographic, economic, and geographic schisms; anti-elite sentiment and populism; and social media and democracy. Dialogues in part II will examine the implications for trust in science and the performance of science advisory systems. Part III will address ethics and values in science advisory systems; the possibility of a "COVID" generation in science, and political influences on international scientific mobility and collaboration. Alumni interested in contributing their expertise or participating in the series are invited to contact the American Friends office at alumni@americanfriendsofavh.org.

Each year AF joins colleagues from the DFG and DAAD to promote German research opportunities and meet with Humboldtians at major meetings around the country. The COVID-19 pandemic has created new challenges but also opportunities for our promotional and outreach efforts.

Among others, American Friends participated in the following scientific organizations' virtual annual meetings:

National Society of Black Engineers
Society for Advancement of Chicanos/Hispanics and Native Americans in Science
Society of Women Engineers

AMERICAN FRIENDS | OF THE ALEXANDER VON HUMBOLDT FOUNDATION

1401 K Street NW, Suite 1005
Washington, DC 20005

COMING UP IN 2021

American Friends of AvH will attend the following meetings in 2021.

Society for Neuroscience Meeting
Virtual | January 11-13, 2021

Association for the Advancement of Artificial Intelligence Meeting
Virtual | February 2-9, 2021

American Physical Society Meeting
Virtual | March 15-19, 2021

American Chemical Society Meeting
Atlanta, GA & virtual |August 22-26, 2021

German Studies Association Meeting
Indianapolis, IN | September 30-October 3, 2021

Alumni Meeting of the German Chancellor Fellows
Arlington, VA | October 29-October 31, 2021

Photo credits:
Karen Norum - page 4
Esperanza Soto Arcino - page 5