Chinese Bioscience Association presents

Thriving in a New Healthcare Paradigm

Powered by Research, Discovery, Innovation, and Investments

23rd Annual Conference

Virtual Conference
Oct. 2 | 8am - 12pm PST
Oct. 3 | 2pm - 6pm PST
www.cbASF.org
Thriving in a New Healthcare Paradigm
Powered by Research, Discovery, Innovation, and Investments

CBA Mission

To Promote Networking
Serve the life science professionals’ interest in the Bay Area and facilitate networking between professionals locally and globally

To Promote Awareness
Enhance public awareness of the progress and development of the life science industry

To Update and Educate
Facilitate a better understanding of key trends in life science as well as encouraging scientific innovations to address unmet medical needs

To Foster Collaboration
Establish active collaborations with other organizations in areas of mutual interests

CBA Membership & Benefits

- Networking opportunities for success
- Connect with other professionals and share technical interests
- Keep skills and knowledge current and relevant
- Create new partnerships
- Free or discounted admission to seminars and workshops
- Free admission to Annual Summer Picnic
- Discounted admission to Annual Conference
- Access to career resources through job posting portal
- Eligibility to vote or become a board member

-----------------------------------------------------------------------------------------------------------------------------
Editor-in-Chief: Scott Chen, Lindsey Xie
Cover Design: Katherine Cao
Content Editing and Quality: Scott Chen, Caesar Ho, Katherine Wang
Published for Annual Conference, Education and Communication
Copyright © 2021 CBA All rights reserved
www.cbasf.org Email: info@cbasf.org
-----------------------------------------------------------------------------------------------------------------------------
# Table of Content

President’s Message........................................................................................................... 2

Conference Chair’s Message ............................................................................................... 3

Conference Agenda ............................................................................................................... 5

Presentations, Speakers and CBA Moderators

Session 1.............................................................................................................................. 7

Oct. 2nd Keynote Presentation............................................................................................... 8

Session 2.............................................................................................................................. 11

CBA Scholarship .................................................................................................................. 16

Session 3.............................................................................................................................. 18

Session 4.............................................................................................................................. 22

Oct. 3rd Keynote Presentation ............................................................................................. 23

CBA Board, Advisors & Organizing Committee ............................................................... 27

Key Events .......................................................................................................................... 28

Sponsors Information .......................................................................................................... 30

* CBA Appreciates the Generous Support from Our Sponsors.*
Welcome from the President of CBA

I am honored to be the president of CBA 2021. On behalf of our board members and advisors, I would like to welcome you to our 23rd annual conference.

CBA was founded 24 years ago with only a few post-doc students in San Francisco. Looking back on all these years with hundreds of scientific conferences and workshops focusing on emerging trends and cutting-edge technologies in the biotech industry, the first thing that comes to my mind is one word—bridge—a bridge that has attracted participants from entrepreneurs, C-level executives, medical professionals, scientists, and students. Whether you are taking the bridge to a hard to reach industrial or academic destination, or you are connecting your own bridge to CBA’s, you are helping CBA accomplish its mission to promote education, networking, and community-building for life science professionals.

The recent pandemic has presented some significant challenges to the life science community. However, it has also offered opportunities for the pursuit of new scientific events. CBA has reached out to world-class research institutions and experts and arranged a series of seminars—from the topics of the origin of COVID-19 to therapeutic antibody development, the benefit of cancer immunotherapy to the management of its side effects, human microbiota to cancer research, and from biotech research and development to bio-manufacturing. In consideration of the booming manufacturing sector, we are introducing our annual scholarship to community college students who are in the bio-manufacturing training program, a step that puts our mission in action.

I would like to take this opportunity to sincerely express my gratitude to all of you for your ideas, your collaborations, and your generous sponsorships.

Last but not least, many thanks to my 2021 task team for your trust in me and for all the time and effort you have devoted in making CBA shine. I am so proud of you.

Sincerely yours,

Shuming Liu, Ph.D.
CBA President 2021
Welcome from CBA Annual Conference Chair

Welcome to the 2021 Chinese Bioscience Association (CBA) conference. The past year has been a time of great challenges and opportunities for the biosciences field. The global healthcare landscape has changed dramatically, particularly in frontline research in the COVID-19 pandemic, as well as emerging technologies for drug discovery and innovations. It is my pleasure to introduce our fantastic line-up of speakers in our 2021 conference theme: “Thriving in a New Healthcare Paradigm: Powered by Research, Discovery, Innovations, and Investments”.

On Saturday morning, we have the first keynote speaker, Dr. Linfa Wang, from Duke-NUS leading in the first session on frontline research battling SARS-CoV-2 and implications on preventions against SARS-CoV-3. Dr. Rob Burgess from Sino Biological will bring us back to challenges to COVID-19 antibodies and their development strategies. Dr. Feng Tian will close the first session with a story of Ambrx in precision biologics. Dr. Zhu Zhen Pirot will open the second session for drug innovations with ways of overcoming bottlenecks for AAV-based gene-therapies from KRIYA. Dr. James Jin will introduce Biocytogen’s humanized-mouse platform for high-throughput antibody discovery. Dr. Shyh-Dar Li from UBC will then introduce novel drug delivery methods that enable new therapeutics. Finally, Dr. Brian Pulliam from Javelin Biosciences will discuss how AI can be leveraged to improve clinical trials.

Starting Sunday afternoon will be Dr. Kai Zhang from UIUC to introduce optogenetic means of controlling embryonic and neural differentiation. Dr. Christina Smolke from Antheia Bio will then establish how equitable access in essential medicines is provided through synthetic biology manufacturing platforms. Dr. Gui-Bai Liang of SHEO Pharmaceuticals will then follow up by analyzing patterns of blockbuster drugs to close out the session. In our last session, Dr. Jonathan Wang of Inmagene will guide us on his keynote discussion on pursuing entrepreneurship. Sandy Chau will discuss qualities in starting a business, while John Rossi will introduce us to next-generation cell therapy products. Finally, Dr. Han Cao will take us on a journey from an idea to IPO and beyond. We will then close the conference with panel discussion from the speakers in the last session.
Welcome from CBA Annual Conference Chair

CBA is also committed to fostering the next generation of biosciences professionals. We will announce the winners of 2021 CBA scholarship awardees and invite current and past awardees to share their excitement in joining the biosciences community. We hope that the 2021 CBA virtual annual conference provides you insight into latest biosciences developments, as well as business and networking opportunities that may arise from our discussions. Please enjoy the conference and see you online!

Shi-An Chen and Dannis Chang, PharmD
CBA Conference Co-Chairs 2021
## Conference Agenda

### Oct. 2nd, 2021. 8:00 - 12:00 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:05 am</td>
<td>Welcome Remarks</td>
<td>Shi-An Chen&lt;br&gt;Conference Co-chair</td>
</tr>
<tr>
<td>8:05-8:10 am</td>
<td>State of the Association</td>
<td>Shuming Liu, Ph.D.&lt;br&gt;CBA President</td>
</tr>
<tr>
<td></td>
<td><strong>Session 1: Frontline Bioscience Research / Session Chair, Shuming Liu, Ph.D.</strong></td>
<td></td>
</tr>
<tr>
<td>8:10-8:50 am</td>
<td>[Keynote] Can we win the battle against SARS-CoV-2 and prevent SARS-CoV-3?</td>
<td>Linfa Wang, Ph.D.&lt;br&gt;Director and Professor, Duke-NUS Medical School, Singapore</td>
</tr>
<tr>
<td>8:50-9:20 am</td>
<td>COVID-19 antibody development, strategies, and challenges</td>
<td>Rob Burgess, Ph.D.&lt;br&gt;Chief Business Officer, Sino Biological</td>
</tr>
<tr>
<td>9:20-9:50 am</td>
<td>Precision biologics for life - an Ambrx story</td>
<td>Feng Tian, Ph.D.&lt;br&gt;Chairman of the Board, President and CEO of Ambrx</td>
</tr>
<tr>
<td>9:50-10:00 am</td>
<td>Sponsor’s program</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Session 2: Innovation in Therapeutics / Session Chair, Mark Chen, Ph.D.</strong></td>
<td></td>
</tr>
<tr>
<td>10:00-10:30 am</td>
<td>Overcoming the adeno-associated Virus (AAV) gene therapy bottleneck – CMC &amp; analytical strategies</td>
<td>Zhu Zhen Pirot, Ph.D.&lt;br&gt;VP of Translational &amp; Analytical Science, KRIYA Therapeutics</td>
</tr>
<tr>
<td>10:30-11:00 am</td>
<td>High-throughput therapeutic antibody discovery using series of humanized mouse models</td>
<td>James Jin, Ph.D.&lt;br&gt;Vice President of Biocytogen</td>
</tr>
<tr>
<td>11:00-11:30 am</td>
<td>Innovating drug delivery technologies to enable novel therapeutics</td>
<td>Shyh-Dar Li, Ph.D.&lt;br&gt;Angiotech Professor, Drug Delivery, University of British Columbia; CEO, NanoStar Pharmaceuticals</td>
</tr>
<tr>
<td>11:30-12:00 pm</td>
<td>How to leverage AI to improve clinical trial feasibility and recruitment</td>
<td>Brian Pulliam, Ph.D.&lt;br&gt;Co-founder and CEO at Javelin Bioscience</td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
<td>Speaker &amp; Affiliation</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2:00-2:02 pm</td>
<td>Welcome Back Remarks</td>
<td>Dannis Chang, PharmD CBA Conference Co-chair</td>
</tr>
<tr>
<td>2:02-2:15 pm</td>
<td>CBA Scholarship Ceremony</td>
<td>Caesar Ho CBA Scholarship Chair</td>
</tr>
<tr>
<td>2:15-2:45 pm</td>
<td>Session 3: Drug development and New Technology /</td>
<td>Kai Zhang, Ph.D. Professor, UIUC</td>
</tr>
<tr>
<td></td>
<td>Session Chair, Sydney Chen, Ph.D.</td>
<td></td>
</tr>
<tr>
<td>2:15-2:45 pm</td>
<td>Optogenetic control of neural differentiation, repair, and embryonic development</td>
<td></td>
</tr>
<tr>
<td>2:45-3:15 pm</td>
<td>Synthetic biology for more equitable access to essential medicines – Antheia’s next generation manufacturing platform</td>
<td>Christina Smolke, Ph.D. CEO, Antheia Bio</td>
</tr>
<tr>
<td>3:15-3:45 pm</td>
<td>Where are blockbuster drugs from?</td>
<td>Gui-Bai Liang, Ph.D. Chief Scientist, SHEO Pharma</td>
</tr>
<tr>
<td>3:45-3:55 pm</td>
<td>Sponsor’s Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Session 4: Entrepreneurship and Investment /</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Session Chair, Ying Luan, Ph.D., MBA</td>
<td></td>
</tr>
<tr>
<td>3:55-4:20 pm</td>
<td>[Keynote] Only the insane want to do a startup – The hardcore thinking about whether to become an entrepreneur</td>
<td>Jonathan Wang, Ph.D., MBA CEO, Inmagene Biopharmaceuticals</td>
</tr>
<tr>
<td>4:20-4:45 pm</td>
<td>Qualities in starting up a business</td>
<td>Sandy Chau, MBA Investor</td>
</tr>
<tr>
<td>4:45-5:05 pm</td>
<td>Next generation cell therapy products - An introduction to Chimeric Engulfment Receptor (CER) T Cells</td>
<td>John Rossi Senior VP and lead of the Translational Medicine team at CERo Therapeutics, Inc.</td>
</tr>
<tr>
<td>5:05-5:25 pm</td>
<td>Idea to IPO in Genomics Technology</td>
<td>Han Cao, Ph.D. Co-founder, President, and CEO, Nuco; Founder, former CSO, Bionano Genomics, Inc.</td>
</tr>
<tr>
<td>5:25-5:55 pm</td>
<td>Panel Discussion</td>
<td>Jonathan Wang, Sandy Chau, John Rossi, Han Cao</td>
</tr>
<tr>
<td>5:55-6:00 pm</td>
<td>Closing Remarks</td>
<td>Shi-An Chen CBA Conference Co-chair</td>
</tr>
</tbody>
</table>
Shuming Liu, Ph.D.

CBA President

Dr. Shuming Liu received her doctoral degree in Medicine from Linköping Medical School in Sweden. She obtained her postdoctoral training at UCSF and worked as a scientist with expertise in molecular cell biology at BD Biosciences. Shuming is passionate about cancer research and education. She is currently the president of the Save Life and Talent Foundation, where she has devoted her time to reaching out to raise cancer awareness in communities such as schools and hospitals. Her educational seminars on cancer prevention, diagnosis, and treatment have attracted people from all over the world. Many of the attendees now belong to a growing online support group which she created to not only offer her counsel but also to offer a community for those fighting cancer. Dr. Liu joined CBA at the beginning of 2019 and has been actively involved in organizing symposiums, social events, and the annual meeting. In her leisure time, she enjoys cooking, photography and traveling.
Session 1 Keynote Speaker

Linfa Wang, Ph.D.
Director and Professor, Duke-NUS Medical School, Singapore

Linfa Wang is a professor of the Programme in Emerging Infectious Diseases at Duke-NUS Medical School, Singapore. He is an international leader in the field of emerging zoonotic viruses and virus-host interaction. His current research focuses on why bats are such an important reservoir for emerging viruses and on how we can learn from bats to make us more resilient to infection and diseases in general. He is a member of the WHO SARS Scientific Research Advisory Committee and played a key role in identification of bats as the natural host of SARS-like viruses. In response to the COVID-19 pandemic, he has served/is serving on multiple WHO committees for COVID-19, including the WHO IHR Emergency Committee. Prof Wang has more than 400 scientific publications, including papers in Science, Nature, NEJM and Lancet. He is currently the Editor-in-Chief for the Virology Journal. Prof Wang was elected to the Australian Academy of Technological Sciences and Engineering in 2019 and the American Academy of Microbiology in 2021.

Presentation Title Can we win the battle against SARS-CoV-2 and prevent SARS-CoV-3?

Abstract When the first mass vaccination against COVID-19 started in December 2020, the world was in full hope of exiting the pandemic once a “herd immunity” was reached, although nobody knew what this herd immunity would look like. Israel was praised as the leading country with the highest vaccination rate using one of the best vaccines on the market. Since the emergence of the Delta variant, this optimism has been greatly dampened and many nations, including Israel, realized that vaccination alone (and using the current vaccines) may not be sufficient to control the new wave of “the Delta pandemic”.

Vaccine producers are now racing to produce the second generation vaccines targeting Delta to achieve the immunobridging boosting that most experts think necessary. However, it has been shown that protective immunity of coronaviruses are highly specific at the strain/variant level and a vaccine against Delta is not fully effective against Beta and, by deduction, future variants.

In this presentation, we will present a cross-clade boosting strategy which is aimed at producing pan-sarbecovirus protective immunity. This represents a 3rd generation coronavirus vaccine (3GCoVax) which can protect against not only current known variants, but also future variants and pre-emergent sarbecoviruses.
Session 1 Speaker

Rob Burgess, Ph.D.
Chief Business Officer, Sino Biological

Dr. Burgess has 25 years of experience in the Life Sciences reagents and services industry. After obtaining his doctorate from MD Anderson Cancer Center in 1995 he co-founded the gene targeting and drug discovery company Lexicon Pharmaceuticals, and has since held other positions such as Director of Scientific Sourcing and New Technologies for Serologicals Corporation, Vice President of Business Development for Stem Cell Sciences, Vice President of Business Development for RayBiotech and most recently Chief Business Officer for Sino Biological. In addition, he has published his research in major scientific journals including Nature and Science and has authored two college textbooks focused on the study of stem cells and nanotechnology.

Presentation Title COVID-19 antibody development, strategies, and challenges

Abstract The global coronavirus (COVID-19) disease pandemic is caused by SARS-CoV-2. To fully understand this new virus there is an urgent need for reagents, such as antibodies specifically recognizing spike (S) or nucleoprotein (N) targets. In order to successfully obtain these antibodies in a relatively short period of time, we simultaneously implemented three strategies for development. These included 1. Based on the high sequence homology between SARS and SARS-CoV-2, reselecting SARS-CoV-2 antibodies from existing SARS antibody inventories; 2. Rescreening existing SARS antibody libraries; and 3. Initiating new immunization procedures with SARS-CoV-2 antigens. In order to obtain antibodies detecting natural samples, we used mammalian cells and insect cells to produce S and N proteins with proper function for the following antibody screening process. We obtained antibodies with high specificity to SARS-CoV-2 molecules and also pan-antibodies of common coronaviruses or SARS-CoV-2 variants (VOIs and VOCs).
Session 1 Speaker

Feng Tian, Ph.D.

Chairman of the Board, President and CEO of Ambrx

Feng Tian, Ph.D., is the Chairman of the Board, President and CEO of Ambrx, and has been with the company for the last 17 years. He has held positions of increasing responsibility since joining in 2004 and has played a crucial role in inventing and optimizing our platform and technologies. As Ambrx’s former Chief Scientific Officer, Dr. Tian has overseen the company’s research and development programs and activities. He led the team to establish various technology programs such as the EuCODE platform and antibody drug conjugate platform. Prior to Ambrx, Dr. Tian conducted his post-doctoral study at The Scripps Research Institute under Professor Peter Schultz. Dr. Tian received his Ph.D. in chemistry from the University of Florida and his B.S. in chemistry from Peking University.

Presentation Title Precision Biologics for Life – an Ambrx Story

Abstract Ambrx (NYSE: AMAM) is a public clinical-stage biologics company focused on innovating engineered precision biologics (EPBs) using our proprietary expanded genetic code technology platform that allows us to incorporate, in a site-specific manner, synthetic amino acids (SAAs) into proteins within living cells. Established in 2003, a pioneer in expanded genetic code technology, Ambrx has designed and developed, with atomic precision, a wide array of product candidate modalities, such as antibody-drug conjugates (ADCs), bispecific antibodies, PEGylated peptides, modified cytokines and immuno-stimulating antibody conjugates (ISACs). Our most advanced internal product candidate is ARX788, an anti-HER2 ADC, currently being investigated in multiple clinical trials for the treatment of breast cancer, gastric/gastroesophageal junction (GEJ) cancer and other solid tumors, including an ongoing Phase 2/3 clinical trial for the treatment of HER2-positive metastatic breast cancer.
Session 2 Chair

Mark Chen, Ph.D.
CBA Advisor

Dr. Chen is an immunologist with expertise in antibody design for therapeutic use and new vaccine discovery for the treatment of human cancers and infectious disease. He completed his Ph.D. in Immunology from Texas A&M University and has a track record of successful leadership roles in R&D, business development, and the marketing of therapeutic antibodies. Dr. Chen has been an active contributing Chinese BioScience Association board member since 2014. He has enthusiastically served CBA in the capacities of Secretary (2014, 2015), Vice President (2016, 2017), and President (2018).
Zhu Zhen Pirot, Ph.D.
VP of Translational & Analytical Science KRIYA Therapeutics

Dr. Zhu Zhen Pirot is the vice president of translational & analytical science at Kriya Therapeutics. She currently leads a team for AAV gene therapy vector design, development, characterization, and analytics for multiple indications including metabolic disease, immune-oncology, ophthalmology, and CNS. Dr. Pirot previously worked in Sangamo Therapeutics as the head of analytical department for product characterization and release supporting company’s gene editing, gene & cell therapy programs. She has extended experience and knowledge in AAV gene therapy development since early year 2000 at Avigen Inc. where she developed the first infectious titer assay for rAVV and played a key role in hemophilia A & B, and Parkinson’s Disease gene therapy development. Her industry experience also includes cancer drug discovery & development at Chiron /Novartis, and bioanalytical assay & biomarker development at Geron Corp. She was trained as Medical Doctor in China and gained Ph.D. in cell & molecular biology from University of Turin in Italy.

Presentation Title overcoming the adeno-associated virus (AAV) gene therapy bottleneck – CMC & analytical strategies

Abstract The adeno-associated virus (AAV) gene therapy is reaching its prime time. Recent approval of gene therapy products had shed the light of promise and hope for the uncurable monogenic as well as highly prevalent diseases. However, challenges in manufacture scale up and analytics are still bottleneck for producing sufficient therapeutic vectors. Establishment of clear CMC and analytical strategies aligning with preclinical, process and manufacture development from early translational studies is critical for speed-to-clinical development. The presentation will discuss integrated strategies and some key analytical development.
Dr. James Jin received his Ph.D. in Virology at Wuhan University in 1997. After his postdoctoral training at Colorado State University, he worked as a Research Assistant Professor at the University of Illinois at Chicago from 2005 to 2010. In 2010, he was recruited to Advanced Cell Technology, Inc. as a Senior Scientist. Dr. Jin joined Biocytogen as the Director of Technology in 2011, where he was promoted to vice president. His research expertise spans the fields of virology, immunology, proteomics, protein structure, human stem cell, and genetic engineering.

**Presentation Title** High-throughput therapeutic antibody discovery using series of humanized mouse models

**Abstract** Antibody drug discovery is a long and complex process involving multiple technologies and platforms. Historically, the most successful antibody candidates require a practical, high throughput developability workflow implemented during early antibody generation, and effective methods for in vivo evaluation prior to clinical trials. Further adding to the complexity is target selection; what will be the most efficient way to select the most suitable targets for antibody drug development? Herein lies the challenge: How do we implement high throughput screening and effective in vivo studies to identify the strongest therapeutic candidates? Humanized Mice, including drug target humanized mice, immune system humanized mice, and humanized immunoglobulin mice will be the most powerful tools to build an effective antibody drug development platform capable of both high-throughput and effective in vivo evaluation properties, so that the selected clinical trial candidates will have higher success rates. This presentation will discuss how Biocytogen’s humanized mouse platforms synergize to accelerate and de-risk the process of antibody drug discovery and development.
Session 2 Speaker

Shyh-Dar Li, Ph.D.
Angiotech Professor, Drug Delivery, University of British Columbia, CEO, NanoStar Pharmaceuticals

Dr. Shyh-Dar Li received his Ph.D. in Pharmaceutical Sciences from University of North Carolina at Chapel Hill, and completed his postdoctoral training at University of California, San Diego. He is now the Angiotech Professor in Drug Delivery at the Faculty of Pharmaceutical Sciences, University of British Columbia, and also the CEO of NanoStar Pharmaceuticals based in Vancouver, BC, Canada. He is currently the Chair of the Faculty's Nanomedicine and Chemical Biology Research and Training Program, and also a Research Leader at the Pan-Canada Nanomedicine Innovation Network. His research focuses on innovating drug delivery technologies to enhance drug targeting with interests in lipid- and polymer-based nanoparticles and prodrug technologies. His research program has been supported by federal funding. In addition to academic research, his team has successfully licensed three drug delivery technologies to industry with one in phase II trials for brain cancer therapy.

Presentation Title Innovating Drug Delivery Technologies to Enable Novel Therapeutics

Abstract Drugs must exhibit favorable physicochemical and pharmacokinetic properties to be able to reach the target cells to exert their pharmacological effects. However, many approved and investigational drugs suffer from poor drug properties, including low water solubility, poor membrane permeability, instability, low selectivity and rapid clearance, leading to reduced safety, efficacy and medication adherence. My research lab and company are focused on developing innovative drug delivery technologies to improve drug properties and their targeting to the disease site to enhance or enable novel therapeutics. I will introduce a few platform technologies developed by my team, including polysaccharide-based nanoparticles for poorly soluble anticancer drugs, hepatocyte-targeting drug delivery, child-friendly formulation technology, non-parenteral delivery of proteins and peptides, and lipid nanoparticles for nucleic acid delivery. These platform technologies have been applied to enable novel therapies for advanced cancer, liver diseases, pediatric rare diseases, diabetes, chronic pain, central nervous system diseases, gene therapy, and vaccine.
Brian Pulliam, Ph.D.

Co-founder and CEO at Javelin Bioscience

Brian Pulliam is co-founder and chief executive officer at Javelin Bioscience, Inc., a start-up devoted to helping organizations utilize machine-learning, A.I., and other information technologies to improve their day-to-day operations and strategy.

Brian is a former Head of Operations and Strategy at Genentech where he oversaw the creation and implementation of programs leveraging emergent technology, as well as the former Chief Scientific Officer of Medicine-in-Need, a non-profit recognized for innovation by the World Economic Forum, where he oversaw more than a dozen development programs.

Brian received a Ph.D. in Biophysics from Harvard University, degrees in Mathematics and Biochemistry from UC Berkeley, and business training from Harvard Business School, Sloan School of Management at MIT and the CFA Institute.

Brian is a passionate advocate for technology, data-driven decision making and believes all things pharma can be improved by simply implementing the innovations right in front of us.

Presentation Title How to leverage AI to improve clinical trial feasibility and recruitment

Abstract The success of a clinical trial pivots on meeting patient recruitment goals and selecting and engaging with the right clinical trial sites and investigators that can effectively launch study start-up activities. While today is an exciting time for pharma, a consistent barrier still remains – the rigorous cost of developing a new medical entity relative to the probability of achieving a successful market entry. To bring a new drug to market, it has been estimated to take an average 10–15 years and approximately $1.5–2.0 billion, and half of this time and investment are generally consumed during the clinical trial phases of the drug development cycle. While many companies hope to have successful phase 3 trials that lead to approvals, the reality is that 90% of drug candidates fail to pass the finish line, with huge implications for the overall cost of drug development. In fact, suboptimal patient selection and site recruitment have been identified as one of the two main causes for high trial failure rates. As competition increases across therapeutic areas and investigators become more focused on outcomes and value, more companies have started to leverage and incorporate new business models with a focus to integrate AI solutions into clinical trial strategies. Over the years, AI is becoming increasingly more advanced with time, with some remarkable capabilities emerging specifically in the clinical trial space, and thus, captured the attention of pharma companies as well as staggering large investments made by prominent investors. The question now is, “Is AI simply too overhyped or does it really have the value to improve drug development process?”

In this presentation, Dr. Pulliam will first discuss and provide his perspective on AI, then focus on the utilization of AI with respect to clinical site optimization and share a framework that answers the question of what needs to be addressed when selecting sites through the lens of AI. In addition, he will also share some of the benefits and potential watch outs of applying AI in study start up in terms of clinical sites and patient recruitment, and how to deploy AI efficiently and effectively in this space.
CBA Scholarship

Caesar Ho

CBA Scholarship Chair

Caesar Ho has been a member of the Chinese Bioscience Association for over 15 years. In years past, he had been actively involved with proceedings and publications, and on occasion, assisted with the selection of speakers for the annual conference. In honor of his late parents, he had sponsored the Ellen & Tony Ho Family Scholarship for 5 years. The annual awards were granted to high school students with good academic credentials and a strong interest to pursue life science in college and beyond. He firmly believes in the recognition and encouragement of academic excellence as an integral part of the CBA mission.

Caesar has over 40 years of experience practicing as an architect. He is currently a principal at the firm of HGA Architects & Engineers. He is responsible for the Science & Technology practice group in the San Jose office. His experience in designing life science facilities includes projects for Abbott Laboratories, Accuracy, Becton Dickinson, Boston Scientific, Cirtec Medical, Genentech, Gilead Sciences, Hansen Medical, Proctor & Gamble, Revance, Roche, etc. He sees his primary contribution as enabling great science to thrive by providing state of the art facilities for researchers, manufacturing personnel, and administrators alike.

Caesar is celebrating 50 years in the US since arriving from Bangkok, Thailand where he grew up. He holds a Master of Architecture degree from the University of Illinois Urbana-Champaign, and Bachelor of Arts degree from the University of Pennsylvania.
CBA Scholarship

The 2021 CBA Scholarship for high school and community college students is named *Scholarship for high school and community college students planning/pursuing a career in Life Science*

The Scholarship consists of 2 awards of $500 each in 2021 and is accepting applications till September 18, 2021.

**ELIGIBILITY**
To be considered, applicants must satisfy the following requirements:
- high school juniors or seniors or community college students in the Fall of 2021
- intent to pursue a major/career in Life Science
- GPA 3.0 or above
- Submit an essay (maximum 300 words) stating your career interests, short term (1-3 years) and long term (5-10 years) goals

**Optional:** A half page (A4 paper) recommendation letter from your science instructor

**NOTES FOR THE WINNERS**
- required to record a 1-2 minute self-introduction video for CBA annual conference

**TIMELINE**
The Scholarship is administered in the approximate timeline as follows.
- Applications must be submitted by September 18, 2021
- Winners are notified September 26, 2021
- Winners must consent to sign a photo release form. If younger than 18 years old, must have parent/guardian signature on the form by September 29, 2021
- Winners must submit a self-introduction video by September 29, 2021
- Scholarships will be awarded during the Annual Conference on Saturday October 3, 2021
Sydney Chen, Ph.D.

Dr. Chen has twenty-five plus years of biopharmaceutical industry experience in product quality, assay development, assay validation as well as in discovery and development of diagnostic markers and therapeutic drugs. Dr. Chen has broad knowledge and hands on experience working with gene therapy products, protein drugs and small molecules and has held various roles in many companies from innovative start-up to big pharma, including Bristol-Myers Squibb, diaDexus, Genemed, Audentes, Telik, Solstice Neurosciences and Revance Therapeutics. She has been the technical director, responsible for analytical development and product quality control of various biologic drug products. She has also been the CMC lead for regulatory correspondences for product's worldwide commercial market. Under her leadership, she and her team have successfully filed and received FDA, EU, Japan and KFDA approval of several products.

Currently Dr. Chen serves as an independent consultant in supporting companies in setting up phase-appropriate GMP management system for sterile manufacturing, assay validation, quality assurance and quality control. Dr. Chen received her doctoral degree in Biochemistry and Cell Biology from Rutgers, State University of New Jersey.

Dr. Chen was a founding member of CBA and has since been a long-time volunteer. She has served in various capacities in the past, including one term as president in 2010 and two terms as vice president in 1999 and 2009.
Kai Zhang, Ph.D.
Professor, UIUC

Dr. Kai Zhang received his Bachelor of Science from the University of Science and Technology of China (USTC) in 2002 and Ph.D. from the University of California, Berkeley in 2008. His Ph.D. work focused on the development of experimental and theoretical approaches for single-molecule fluorescence spectroscopy and nonlinear optical microscopy. In 2009, he joined Stanford University as a postdoctoral scholar and made a transition from the field of physical chemistry to neurobiology, studying axonal transport in neuronal diseases with single-molecule fluorescence microscopy. In August 2014, Dr. Zhang joined the Biochemistry Department of the University of Illinois at Urbana-Champaign (UIUC) as a tenure-track assistant professor and was promoted to Associate Professor in 2021. At Illinois, the Zhang laboratory develops new biotechnologies including optogenetics and single-molecule fluorescence microscopy to investigate how growth factor-mediated signal transduction regulates cell fate determination. The long-term goal of Zhang’s research is to delineate how spatiotemporal regulation of growth factor-mediated signal transduction determines cell differentiation during embryonic development and how this signaling process is compromised in diseases such as neurological disorders and cancers. Current research is supported by UIUC, Research Corporation for Science Advancement, NIH/NIGMS, and NIH/NIMH.

Presentation Title Optogenetic control of neural differentiation, repair, and embryonic development

Abstract Light as a treatment strategy has been previously used in photo-dynamic therapy. Being biocompatible and leaving no residual effect in the exposed area, light offers enormous attractive features for disease treatment. However, most photo-dynamic therapy typically uses light to generate high-energy chemicals (e.g., reactive oxygen species) with no differentiating power between normal and diseased tissues. Optogenetics uses light-inducible protein-protein interactions to precisely control the timing, localization, and intensity of signaling activity. The precise spatial and temporal resolution of this emerging technology has proven extremely attractive to accomplish precise control of cell behavior in live animals. Here, I will share with you our recently developed optogenetic platforms that empower precise modulation of cell fate during neural formation, repair, and embryonic development.
Session 3 Speaker

Christina Smolke, Ph.D.
CEO, Antheia Bio

Christina D. Smolke is the CEO and co-founder of Antheia and Adjunct Professor of Bioengineering at Stanford University. She earned her B.S. in Chemical Engineering at the University of Southern California in 1997 and her Ph.D. in Chemical Engineering at UC Berkeley in 2001.

Dr. Smolke is a pioneer in the fields of synthetic biology and metabolic engineering. At Stanford, her team led the breakthrough research to engineer baker’s yeast to produce some of the most complex and valuable plant-based medicines known to humankind, including the opioids, noscapinoids, and tropane alkaloids. At Antheia, her vision and leadership have enabled a synthetic biology platform that dramatically expands the diversity and complexity of molecules that can be reconstructed, enabling new possibilities for drug discovery as well as rapid, localized, on-demand drug manufacturing at scale.

Dr. Smolke is the recipient of numerous awards, including the NIH Director’s Pioneer Award, Chan-Zuckerberg Biohub Investigator, Nature’s 10, AIMBE College of Fellows, WTN Award in Biotechnology, and TR35 Award.

Presentation Title  Synthetic biology for more equitable access to essential medicines – Antheia’s next generation manufacturing platform

Abstract  Nearly half of pharmaceuticals, including many common and essential drugs, are sourced from nature. Most active pharmaceutical compounds are extracted from plants that are farmed as crops — an inefficient, expensive, risk-laden process. Agricultural supply chains are vulnerable to natural disasters, climate change, pests, and disease; they’re also inflexible to sudden changes in demand. The consequences, which include shortages of life-saving drugs, can be deadly.

Synthetic chemistry can reconstruct some plant-inspired molecules, but it can't replicate nature's biological complexity — multi-step metabolic pathways in which cells and their organelles work in concert to make desired proteins. The pharmaceutical industry needs new technologies and methods to overcome these limitations, discover new medicines, and realize a more efficient, resilient manufacturing model.

Synthetic biology promises to do so, and Antheia was built to fulfill this promise. Antheia is unlocking the medicinal power of nature with a next-generation synthetic biology platform for drug discovery and manufacturing. The company’s novel approach to bioengineering reconstructs plant-inspired molecules in yeast to achieve the complexity and diversity found in nature.
Gui-Bai Liang, Ph.D.

Chief Scientist, SHEO Pharma

Dr. Gui-Bai Liang graduated from Fudan University with a Bachelor’s degree in chemistry, and earned his Ph.D. degree in bioorganic chemistry from University of Wisconsin-Madison. After postdoctoral research in Cornell University, he joined Merck Research Labs in New Jersey, and participated in a number of drug discovery programs, including the hugely successful DDP-4 Inhibitor program that led to the discovery of the blockbuster drug Sitagliptin for type 2 diabetes.

In 2012, he joined WuXi AppTec in Shanghai as an executive director of Integrated Discovery Service Unit, responsible for business development, client management and US operations. In 2017, after a short period of private consulting, he co-founded the SHEO Pharma as the chief scientist of the new company.

He has been writing "behind the scene" stories of drug R&D in a widely read column, “Liang’s Drug Talk (老梁说药)”, and he also published a series of books titled “Stories of New Drugs”

**Presentation Title** Where are Blockbuster Drugs From?

**Abstract** The talk “Where are Blockbuster Drugs From?” is a retrospective analysis of some hugely successful drug discovery programs that led to blockbuster milestone drugs. What were the key elements, and the significance of the discovery? What did they have in common? And more importantly, what can we learn from these successful programs?
Ying Luan, Ph.D., MBA

CBA Board Member

Ying Luan Ph.D. MBA is currently Senior Staff Biostatistician at early multi-cancer detection company GRAIL Inc. Ying is an experienced pharmaceutical strategist and executor with strong analytical, communication, consulting, management, and leadership skills. She has 14 years of pharmaceutical statistician experience working at Pharmacyclics/Abbvie, Jazz Pharmaceuticals, Teikoku Pharma USA, and Alza/Johnson & Johnson, in the therapeutic areas of immunology, Central Nervous System (CNS) and oncology. Her expertise includes statistics, clinical trial design, SME for licensing and M&A activities, regulatory strategy, submission, interactions with health authorities for new drug approval, label negotiation and expansion, managing biometrics CROs, partnership alliance, and clinical development. Ying got her Ph.D. in Statistics degree from the University of California, Riverside, and MBA from Wharton School, University of Pennsylvania. Her Master’s in Mathematics is from the University of Waterloo, Canada, and Bachelor’s from the Renmin University of China. Ying joined Chinese Bioscience Association SF in 2019 as a volunteer and supported a series of in-person and virtual activities.
Session 4 Keynote Speaker and Panelist

Jonathan Wang, Ph.D., MBA
CEO, Inmagene Biopharmaceuticals

Dr. Jonathan Wang has over 30 years of healthcare and life sciences experience, spanning entrepreneurship, investment, research, and finance. Under the supervision of Eric Kandel, a Nobel Laureate, he obtained a Ph.D. in Neurobiology from Columbia University where he was rewarded the Howard Hughes Medical Institute (HHMI) Research Fellowship. He also earned an MBA from Stanford University.

Dr. Wang is the Chairman and CEO of Inmagene, a leading clinical-stage biotech company focused on immunology-related therapeutic areas. With wholly owned subsidiaries in San Diego, Shanghai, Hangzhou and Wuhan, the company has raised approximately $140M financing and is building a strong pipeline with over 10 drug candidates. The lead drug candidate, IMG-016, is projected to file NDA in China in 2022, and another drug candidate, IMG-020, has entered global phase 2 trials for multiple autoimmune indications.

Dr. Wang was a Partner at OrbiMed, the world’s largest healthcare-dedicated investment firm. He co-founded OrbiMed Asia where he played a leadership role in establishing and managing $1.1B PE/VE funds. He invested in many successful companies, such as Zai Lab (NASDAQ: ZLAB), AngelAlign (06699.HK), ForteBIO (acquired) and Genewiz (acquired), and was named one of the top 10 healthcare investors in China. He incubated Apollomics and Bridge (acquired), and served as Chairman at Apollomics and AngelAlign.

He is a HKEX Biotech Advisory Panel member and a co-founder and former Chairman of BayHelix, a premier organization of Chinese healthcare business leaders. He has authored three philosophy of science books.

**Presentation Title** Only the insane want to do a startup – The hardcore thinking about whether to become an entrepreneur.

**Abstract** So many people have made so much money by starting up companies! Should I do it? But it is so scary! What if I fail? Working for a big company, I have a glamorous title. My job pays well and I could get a big bonus at the end of the year. It would be insane to give all that up to start a company from scratch. Perhaps I could build a startup on the side…sort of getting the best of both worlds?

These are the common thoughts of countless people who debate with themselves on whether to start a company. Jonathan Wang went through the same thoughts before establishing Inmagene. In a no-bullshit manner, he wants to share his learning and realization with you.
Sandy Chau was born in Shanghai. He spent his primary school years in Hong Kong, Junior High School years in Vietnam and then High School years in Hong Kong before graduating from UC Berkeley with a degree in Engineering. Then he went to Vietnam working in food processing industries. After 1975, he obtained an MBA degree and simultaneously worked under a grant from the Department of Commerce to help minorities in business startups. In 1978 he started as CEO of Universal Semiconductor Inc. in San Jose. In 1982 he began VC investments in Silicon Valley. He then moved to Taiwan in 1986 and then to Hong Kong in 1989. Until 1999 he was mostly involved in real estate, hospitality industries and department stores business in Taiwan, China and in the USA. From 2000, he was mainly involved in VC investments. Joining the Acorn Group in 2006.

Mr. Chau is a philanthropist and focuses on social justice issues. In addition to be the founder and Chairman of the Civic Leadership USA, he is the board chair of Vision New America and executive board member of Shin Shin Education Foundation, an organization dedicated to educational equity in China.

**Presentation Title** Qualities in starting up a business
John Rossi

Senior VP and lead of the Translational Medicine team at CERo Therapeutics, Inc.

Mr. Rossi is a Senior Vice President and leads the Translational Medicine team at CERo. Prior to joining, Mr. Rossi was Senior Director of Translational Medicine and Head of Cell Therapy Clinical Pharmacology at Kite, a Gilead Company. While at Kite, Mr. Rossi led translational activities supporting the clinical development and global approvals of Yescarta® and Tecartus® CAR T cell therapies. Mr. Rossi’s team also supported work focusing on the mechanistic understanding of engineered cell therapy products under strategic collaborations with the NCI and numerous leading academic institutions. Before Kite, Mr. Rossi spent 13 years in oncology drug development at Amgen working with teams to identify novel biomarkers for hematologic.

Presentation Title Next generation cell therapy products - An introduction to Chimeric Engulfment Receptor (CER) T Cells
Session 4 Speaker and Panelist

Han Cao, Ph.D.

Co-founder, President and CEO, Nuco
Founder, former CSO, Bionano Genomics Inc

Dr Cao has previously co-invented and developed a groundbreaking nanochannel array platform technology for dynamic linear long range genomic and epigenomic analysis in personalized medicine, based on a DARPA-funded multimillion-dollar project at Princeton University. As the founding CEO then Chief Scientific Officer of Bionano Genomics Inc for 15 years since its inception, he has led and participated in over $15 M Federal (NIH, NCI, NIST) and state government funded projects in the last decade and been instrumental in raising over a hundred million US dollars venture and public financing developing the massive parallel single molecule linear analysis platforms. Today, genomic structural variation study has become a mainstream intensive discovery and translational research area, it provides critical missing pieces of genomic information for realizing the full potentials of the personalized and precision medicine. This technology has been used by scientists and clinical researchers worldwide and cited in hundreds of publications, proven to be essential in accurate de novo genome assembly to reveal the “dark matter” of the complex and changing genome and for new single molecule level diagnostics approach in cancer, complex rare and undiagnosed diseases. The technology has been named one of the MIT Tech Review top ten tech will change the world and the commercial system the top ten Innovative Technology Products of the year by The Scientist magazine.

Dr. Cao received his BS degree from University of Science and Technology of China and a Ph.D. in Molecular and Cellular Biology from University of Delaware. He worked in the National Key Lab of Protein and Genetic Engineering and Global Genomics Group of DuPont Company. He has done postdoctoral work at The Institute for Human Gene Therapy at the University of Pennsylvania Medical Center and NanoStructure Lab at the Electrical Engineering Department of Princeton University before founding Bionano Genomics Inc and now Nuco Inc, his second platform technology startup company raising funds to focus on solving bottleneck problems in the new era of genomics driven diagnosis and medicine and information storage, using multidisciplinary innovative solutions including AI imaging.

Presentation Title Idea to IPO in Genomics Technology

Abstract Building a company from an academic idea all the way to IPO (NASDAQ: BNGO, now part of Russell 2000 small cap Index) based on his vision, Dr Cao has led over 20 years of entrepreneur experience in genomic analysis tool and research/clinical applications development, especially in the field of micro/nanodevice and single molecule analysis. Being a pioneering voice in the last decade advocating using new long range technology to assemble complete haploid resolved medical grade genome at the highest quality possible to uncover and understand the unknown and under-explored long range genomic structural variations (SVs) and their functional roles, Dr Cao and his team have worked and published series of milestone papers with many top genomics experts in the world and transformed how we view and study the books of life, genome.
CBA Organizing Committee

Officers
President: Shuming Liu, Ph.D.
Director of Operation and Membership: Frank Zhou, Ph.D.
Secretary: Lindsey Xie, M.S.
Treasurer: Katherine Wang, Ph.D.
Conference Co-chair: Shi-An Chen, Dannis Chang PharmD, MBA
Director of Sponsorship: Bing Liang, Ph.D., J.D.
Director of Scientific Affair: Ying Luan, Ph.D., MBA
Co-director of E-Communication: Scott Chen, Ph.D.; Lindsey Xie, M.S.
Director of Volunteers: Jing Folsom, Ph.D.
Webmaster: Jia Jun Chia, M.S.
Scholarship Committee: Caesar Ho (Chair), Shuming Liu, Ph.D., Jing Folsom, Ph.D.

Advisors
Dannis Chang, Advisor (2020 CBA President)
Huifang Li, Advisor (2019 CBA President)
Mark Chen, Advisor (2018 CBA President)
Patrick Yang, Advisor (2017 CBA President)
Kai Zheng, Advisor (2016 CBA President)
Shih-Chen Chang, Advisor (2015 CBA President)
Michelle Chen, Advisor (2014 CBA President)
Lin Sun-Hoffman, Advisor (2013 CBA President)
Patty Kiang, Advisor (2011 CBA President)
Sydney Chen, Advisor (2010 CBA President)
Kelley Liu, Advisor (2007 CBA President)
Shian-Jiun (SJ) Shih, Advisor (CBA Founding President)
CBA Key Events

The unprecedented pandemic that started in early 2020 has challenged us in every aspect of our lives. After going through a short period of adjustment, CBA started to hold Zoom conferences in 2020 and continued in 2021. We are committed in functioning not only as a bridge in professional careers, but also a platform of networking in our lives. Besides online activities, we provide our members opportunities to get together in person, such as hiking together. With the joint efforts of CBA board members, we have been gaining momentum in our activities and broadening the horizons of our knowledge.

Checkpoint Inhibitors’ Immune-Mediated Side Effects: A Perspective from A Non-Oncologist Physician

Dr. James Mu, a prominent gastroenterologist in the Seattle area, will introduce the fascinating new topic by a few case studies followed by a systematic literature review. His talk will illustrate the rapid adoption of biological therapies including immunotherapy and the new challenges that occur as a result. You may find the topic highly relevant, whether you are a scientist in biotech industry or a clinician in primary care or subspecialty.

Host: Chinese Bioscience Association
Time: July 17th, 10 am — 11:30 am (Pacific Time)
Zoom Meeting ID: 940 3619 7939
Passcode: 2021
This seminar is co-sponsored by:

Diet, Microbiota, and Cancer
A Perspective from an Oncologist

Dr. Ming-Gui Pan, a prominent oncologist at Kaiser Permanente will review recent research advances on the relationship between diet and gut microbiota and how it affects human health including risk of cancer and its treatment, from basic science research to clinical practice.

Host: Chinese Bioscience Association
New Hope Chinese Cancer Care Foundation
Time: July 31, 2021 (Sat.) 10:00 — 11:30 am (Pacific Time)
Meeting ID: 873 3566 3638
Passcode: 2021
CBA Key Events

FROM HENDRA TO WUHAN: EMERGING ZOONOTIC VIRUSES OF BAT ORIGIN IN A QUARTER OF CENTURY

SPECIAL FORUM BIOSCIENCE & TECHNOLOGY ACCELERATING THE FUTURE

CAREER JOURNEY FROM PROFESSOR TO ENTREPRENEUR

Ongoing Battle Against COVID-19 Therapeutic Antibody Development

Date and Time:
April 24, Saturday, 4:30-7:00 PM (Pacific Time)
China Beijing Time: April 25, Sunday, 7:30 – 10:00 AM
Webinar Platform: Zoom Conference
Registration Link: https://bit.ly/3vCTpyv

The pharmaceutical industry has responded with the fastest drug discovery and neutralizing antibodies as a therapeutic option. While vaccination is underway in many countries, there is an increasing concern over newly emerging variants of the virus. What have we learned from therapeutic antibody development in this pandemic? How can we accelerate antibody development to fight the variants of the virus?
Sponsors

**Sapphire Sponsor**

MYCENAX

**Platinum Sponsors**

MOST

InvestHK

ProMab

**Gold Sponsors**

BIOCYTGEN

SinoBiological
Sponsors

Silver Sponsors

TRIBI SCIENCE

Emerson Biotech Consultant and Seiyu Chen

Nonprofit Sponsor

alzheimer's association®
CDMO Services for
Biologic products from
Mammalian and Microbial
systems, Cell Therapy,
and Antibody-drug
Conjugate

- Cell Line Development
- Process Development
- Analytical Development
- GMP Manufacturing
- Aseptic Fill/Finish

info@mycenax.com.tw
www.mycenax.com.tw
We are here to connect.

Science & Technology Division
Taipei Economic & Cultural Office in San Francisco

e-mail: sdsf@scientesfsf.org www.most.gov.tw/sf/ch
HONG KONG – AN INNOVATION AND TECHNOLOGY HUB

With new opportunities brought by the Belt and Road initiative and the Guangdong-Hong Kong-Macao Bay Area development, you can leverage on Hong Kong’s strengths in R&D, world-class infrastructure, sound legal system and strong intellectual property right protection to grow your business globally.

Hong Kong is the ideal place for you to build and grow your innovation and technology business. Invest Hong Kong has the expertise to help you set up and expand smoothly in our city. Our services are free, confidential and tailored to your needs.

Get in touch at investhk.gov.hk

InvestHK
The Government of the Hong Kong Special Administrative Region

25/F, Fairmont House, 8 Cotton Tree Drive, Central, Hong Kong
Tel: (852) 3107 1000
Email: enq@investhk.gov.hk

San Francisco office: Lawrence Tang
Tel: (1) 415 835 9318
Email: Lawrence_Tang@hkетosf.gov.hk
The ability to genetically modify immune cells provides a powerful tool to sense and treat diseases that our natural immune system cannot normally handle. ProMab’s established CAR-T CRO platform allows us to work not only with T cells but also advance research in other immune cell types by utilizing highly capable cellular engineering techniques such as gene editing, viral transduction, setting up model cell systems, or performing detailed cell-based assays.

**Types of Cells:**

- Macrophage
- Dendritic cell
- Natural Killer cell
- γδ T cell
- Erythrocyte
- B cell
- Monocyte
- T cell

All products are for research use only.

**Discover more | www.promab.com**

2600 Hilltop Dr, Building B, Suite C320, Richmond, CA 94806
1.866.339.0871 | info@promab.com
INNOVATIVE SOLUTIONS TO ACCELERATE ANTIBODY DISCOVERY

Humanized Mouse Models
- Humanized Immune Checkpoint Mice
- Immunodeficient B-NDG Mice for Xenograft Studies
- Humanized Cytokine & GPCR Mice
- Humanized Tumor Cell Lines

Antibody Discovery
- Fully Human Therapeutic Antibodies, Surrogates, Anti-idiotypic & Bispecific/Multispecific Antibodies
- Single B Cell Cloning Technology
- Best-In-Class Fully Human Antibody Mouse

Pharmacology Services
- Expertise in Efficacy Evaluation of Novel Therapeutics
- In Vivo Studies, In Vivo Assays, PK, PD, Toxicity Assessments

Gene Editing Services
- CRISPR/Cas9-Based Extreme Genome Editing (EGE™)
- ESC-Based Homologous Recombination (Large Fragments)
- Models or Cell Lines

OUR INTEGRATED SERVICES
Global Leader in Recombinant Technology

- From Human Cells
- Customized recombinant production services
- 6,000+ mAbs
CRAMS - One-stop platform

Antibody development and mfg

Antibody Bioconjugation

Linker-toxin synthesis

Fill-finish for drug product mfg

Antibody-Drug-Conjugation

- Ten years’ experience for HPAPI
- Lab: Expertise with more than 10 different ADCs
- Lysine, cysteine, and proprietary linkage technologies
- In-house chemical-physical property characterization

- Isolater (GENTINGE) equipped with 30L /50L stainless reactor or glass reactor
- TFF (Sartorius) with single-use lining
- Seeking partnership for TSY0110, a biosimilar of ado-trastuzumab emtansine (with Formosa Pharmaceuticals)
EirGenix, Inc. is a new Asia Development & Manufacturing Hub for Biologics that offers high quality and cost-effective services to support clients from around the world. The firm currently owns and operates two cGMP compliant plants, producing microbial expression system and mammalian expression system based biologics. We can provide services all the way from cell line development to releasing of drug substance.

OUR NEW FACILITY
A new commercial facility located in Zhubei Medical Science Park is currently under construction and will be initially ready for service in 2018. 12 x 2000L Single Use Bioreactor (SUB) system for mammalian cell culture will be on line to scale out your commercial success. In addition, there will be a 1000 Liter Stainless Steel fermentation system and two downstream purification suites for microbial expressed protein production.

OUR CAPACITY
Scale out from 2000 Liter to maximum 12 x 2000 Liter

12 x 2000 Liter
SINGLE USE BIOREACTOR

Maximum 1000 KG
ANNUAL mAbs PRODUCTION CAPACITY

CLIENT’S SUCCESS IS OUR PRIORITY

ADDRESS
No. 101, Lane 169, Kang Ning Street, Xizhi District, New Taipei City 22180, Taiwan R.O.C.

CONTACT US
service@eirgenix.com
+886-2-7708-0123

WEBSITE
www.eirgenix.com
“ISTAART is a terrific opportunity for me to connect on critical topics with colleagues from around the world.”

Jeffrey Kaye
ISTAART and Advisory Council Member

“Alzheimer’s & Dementia expands the conceptual link between research, clinical care and public policy. Our field needs the timely exchange of new knowledge.”

Ana S. Khachaturian
Executive Editor

You need volunteers to advance your clinical studies. We have thousands of people eager to participate.

Advance your research. Listing your studies in TrialMatch can help you attract volunteers — a critical component to moving your work forward. TrialMatch offers the potential to get your studies in front of thousands of volunteers.

Provide alternative opportunities to volunteers who screen out of your studies. Rather than turn non-qualifying study participants away, direct them to TrialMatch. Signing up provides them with a chance to explore other studies and review additional opportunities as they become available, including future studies your team may be conducting.

Contact us to find out more

alzheimer’s association

alz.org/ISTAART

INTERNATIONAL SOCIETY TO ADVANCE ALZHEIMER’S RESEARCH AND TREATMENT

alz.org/trialmatch | 800.272.3900

alz.org | 800.292.3900