JULIA C LEE — RESUME

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PROFESSIONAL SUMMARY

Strategic thinker with extensive senior-level global leadership experience spanning 21-years. Analytical thinker and divergent problem-solver leading high-performing, multi-disciplinary teams to drive organizational, technological and performance capabilities through innovation and analysis. Navigated successfully between multiple fields -- in some instances, combining these fields for new cross-disciplinary projects. Function according to modus operandi of innovating beyond extant technologies and accepted thinking. Confident at the helm of advisory committees and engaging with top-level senior leaders of academic, governmental and private institutions to delineate objectives and design clear strategic plans. Strong research and execution skills, capable of adapting quickly to a broad array of cultures as a result of lived experiences in US, Europe, South America and Asia.

CORE QUALIFICATIONS

- Cross-/multi-disciplinary talent management
- Strategic, critical, analytical, creative thinker
- Quantitative & qualitative multidisciplinary research & problem solving
- Global integration
- Organizational transformation
- Grant/proposal writing
- University teaching
- International profile
- Multilingual
- Public Speaking

SELECT ACTIVITY HIGHLIGHTS

- Core team charged with defining, building and executing strategic vision for engineering university in Peru; annual revenue increase is 1.5% from 2014-2020
- Pioneered new multi-disciplinary subfield in astrophysics at the intersection of astrophysics, condensed matter physics, physical- and cosmo- chemistry, computation, theory and experiment
- Led an international group comprising of university and industry leadership (primarily university presidents/provosts/deans and vice presidents of industry) to develop a global industry-university degree program focused on innovation as relevant to Sustainable Development Goals
- Served on NASA and European committees for new X-ray satellite missions, science advisory committees, proposal review committees, and prize fellowship selection committees
- Served on Executive Committee for U.S. High Energy Astrophysics
- Served on international government and academy working groups in U.S., Europe, and South America
- Served on Fulbright Commission (with the Brazilian government) to address university education reform
- Career proposal funding: ~$30M (includes facilities use cost) over 21 different national and international facilities
- Lead and principal investigator for 40+ successful national and international proposals for research with space satellites, telescopes and national synchrotron facilities including SLAC, Brookhaven, LBNL ALS
- Co-led inaugural (international) effort to create an organization to elevate and support women – a collaboration with the UN (https://theidealsociety.org/)
- Invited keynote lectures (including to UN), topical reviews & seminars at international conferences and 30+ top universities worldwide
- Author & co-author of (career total) 70+ publications in main professional astrophysics journals in U.S. & U.K, including many “first” discoveries; additional 30+ conference proceedings & 6 press releases

NOTABLE AWARDS AND RECOGNITION

- 2015 Breakthrough Prize in Fundamental Physics (shared)
- 2007 Gruber Cosmology Prize (shared)
- NASA (Chandra) prize fellowship
- Isaac Newton Fellowship (Cambridge University)

EXPERIENCE

Executive Vice Provost for Strategic Initiatives **Jan 2016 -- xx**
Universidad de Ingeneria y Technologia (UTEC) — Lima, Peru

- Key member of the core team charged with building and executing the vision for this new university
- Key member of the core team charged with the design and implementation of the University strategy
- Lead for the design and implementation of the academic vision and university wide curricular change
- Co-lead (with the provost) the elaboration of the university strategies and vision for research and academics
- Co-lead (with different faculty chairs) the development of major trans-/multi-disciplinary research centers
- Co-lead (with the CEO/president & provost) the elaboration and prioritization of a blue print on UTEC advancements
- Co-lead the design and implementation of policies related to faculty development, promotion and salaries structures
- Define initial strategies and priorities for the UTEC Center or Teaching and Learning
- Review and redefine the international alliances based on the strategy of the University

Executive Director for Education and Research **2014 -- 2021**
Harvard John A. Paulson School of Engineering & Applied Sciences (SEAS)

- Select Administrative Oversight
  - Legal: Review, negotiate, advise and be a liaison for legal needs (IP, NDAs, MOUs, contracts etc.) for university-university, faculty-industry, and club-industry relationships, on behalf of SEAS faculty and students
  - Head of international programs; support existing and develop new international experiences for undergraduates
  - Oversee/develop SEAS collaborations with schools and institutions within Harvard (other Harvard schools and/or centers) and external to it (e.g. industries, government, academic institutions worldwide) for research and education
  - Host/co-host for delegations / government officials / industries
  - Develop/amend policies for existing and new administrative units as needed
- Select Academic Engagements
  - Assist in the development of new degree programs, including masters programs and executive education
  - Teach in the Masters in Design Engineering program
  - Lead international group of universities and industries to develop a global certification degree on SDG-focused innovation
- Select Committees:
  - International: Royal Academy of Engineering international working group
  - Harvard Vice Provost Working Group on Teaching and Learning

Professor (Asst : 2005-2009; Assoc.: 2009-2014) **July 2005 to July 2014**
Harvard University Department of Astronomy

- Pioneered new multi-disciplinary subfield in astrophysics at the intersection of astrophysics, condensed matter physics, physical- and cosmo- chemistry, computation, theory and experiment.
- Designed and led 40+ multidisciplinary international projects and research teams with senior members (deans, national laboratory directors, and professors) spanning the U.S., Europe and Asia.
- Successful proposals for numerous experimental programs using satellites and ground based experimental facilities, including national observatories and major synchrotron facilities, including SLAC, Brookhaven, and LBNL ALS
- Peer-elected to serve on the Executive Committee for the American Astronomical Society High Energy Astrophysics Division; duties included but were not limited to engaging with congressional staffers and representatives on extant and proposed research missions pertinent to high energy astrophysics and science in general, and attending briefings at NASA Head Quarters and the National Science Foundation.
- Research mentorship (and thesis advisor) for undergraduates, graduate students and postdocs. The majority have gone on to win major (inter)national prizes and top placements.
- University teaching and advising of undergraduates, graduate students and postdoctoral fellows.
- Committees: University incl. at VP levels; Thesis (including as chair), Prize Fellowships, Graduate Admissions

NASA (Chandra) Postdoctoral Prize Fellow **Sept. 2002 to July 2005**
MIT and Harvard University served as official host institutions

- Prize Fellows are funded by NASA to develop their own independent research program at an academic institution of the fellow's choosing. I chose to spend my fellowship years primarily resident at MIT, Institut Astrophysique de Paris, UC Berkeley, and Harvard. (5 awards are given annually through an international competition.)
- Research: plasma under extreme temperature and density conditions in space environments

Postdoctoral research associate **Dec. 1999 to Sept. 2002**
Massachusetts Institute of Technology

- Research: high resolution X-ray spectroscopic studies of black holes, the interstelllar and integalactic medium
- Developed software to analyze spectroscopic data from the newly launched NASA Chandra X-ray mission.

Staff Research Associate **June 1994 to Aug. 1996**
Lawrence Berkeley National Laboratory Institute for Nuclear & Particle Astrophysics

- Analyzed data and conducted research for the Supernova Cosmology Project. Co-authorship on the paper that was awarded the 2011 Nobel prize in Physics for the discovery of cosmic acceleration by a dark energy force.
- Coding in IDL, C, Fortran, UNIX
- Designed on-line educational programs for Hands-on-Universe for middle and high school students.

EDUCATION

Ph.D. : Astrophysics, University of Cambridge, United Kingdom	2000
Bachelor of Science : Astrophysics, UCLA	1994
Bachelor of Science : Mathematics, UCLA	1994

ADDITIONAL CERTIFICATIONS & TRAINING

Leadership & Management, MIT Sloan School 2014
Courses include Entrepreneurship Development Program, Essential Law for Executives, Strategy in a Global World, Negotiation for Executives

SELECT PROFESSIONAL SERVICE AND AFFILIATIONS

- Sigma Xi Scientific Research Society Life member
- NASA & European Space Agency Science Advisory Committees
- NASA Satellite User Advisory Committees
- Fulbright Commission, Brazil
- International Working group commissioned by the Royal Academy of Engineering to develop a 'Career Framework for University Teaching' (https://www.teachingframework.com/)
- Review committee for (inter)national prize fellowships
- Proposal review committees for astrophysics and atomic physics
- Peer review for professional journals
- International Science Organizing Committees
- New England Board of Higher Education Minority program

PUBLICATIONS

- 70+ peer-reviewed publications on 6 distinct astrophysics specializations.
  See http://scholar.harvard.edu/jclee/publications.
- Notable Papers: Brief summaries of significant field discoveries in select papers
  See http://scholar.harvard.edu/jclee/pages/notable-publications.