

Curriculum Vitae for ELAINE FUCHS

Investigator Howard Hughes Medical Institute
Rebecca C. Lancefield Professor
Robin Chemers Neustein Laboratory of Mammalian Cell Biology and Development
The Rockefeller University
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Tell 212-327-7953

EDUCATION AND TRAINING:

University of Illinois B.S. Chemistry, 1972; Highest distinction in the curriculum.
Princeton University: Ph.D., Biochemistry, 1977 (Professor Charles Gilvarg).
Massachusetts Inst. Technology: Postdoctoral Fellow, 1977-80 (Professor Howard Green).

POSITIONS

1980-1985 Assistant Professor, The University of Chicago. Department of Biochemistry.
1985-1988 Associate Professor, The University of Chicago. Department of Biochemistry and Molecular Biology; Department of Molecular Genetics and Cell Biology
1989-2002 Amgen Professor of Basic Sciences, The University of Chicago. Department of Biochemistry and Molecular Biology; Department of Molecular Genetics and Cell Biology; Committee on Developmental Biology; Committee on Genetics; Committee on Cancer Biology.
1988-2002 Investigator, Howard Hughes Medical Institute, The University of Chicago.
2002- Investigator, Howard Hughes Medical Institute, The Rockefeller University.
2002- Rebecca C. Lancefield Professor, The Rockefeller University, Laboratory of Mammalian Cell Biology & Development

HONORARY DOCTORATES

Honorary Doctorate of Science Degree (Mt Sinai Sch. Medicine and New York University '03)
Honorary Doctorate of Science Degree (University of Illinois, Champaign-Urbana, '06)
Honorary Doctorate of Science (Albany Medical College '15)
Honorary Doctorate of Science (Harvard University '16)
Honorary Doctorate of Science (Weizmann Institute '24)
Honorary Doctorate of Science (Memorial Sloan Kettering '24)

OTHER HONORS and AWARDS

(* denotes special importance)

University of Illinois. 1968-72:

Phi Beta Kappa
Phi Kappa Phi
Alpha Lambda Delta
Sigma Xi
Agnes Sloan Larson Award for the Outstanding Freshman Chemistry Student
Straight A Book Award
Iota Sigma Pi Award
Reynold Clayton Fuson Award in Chemistry
James Scholar
Illinois State Scholarship
Argonne National Laboratory Scholarship
*Bronze Tablet (top 3% Class).

Princeton University. 1972-77:

NIH Predoctoral Fellowship

Massachusetts Institute of Technology. 1977-79:

Damon Runyon Postdoctoral Fellow

University of Chicago. 1980-01:

Andrew Mellon Fellow ('81)

*Searle Scholar ('81-'83)

NIH Career Development Award ('82-'87)

*Presidential Young Investigator ('84-'89)

Nation's 100 brightest scientists under 40 (Science Digest, '84)

Nation's Outstanding Scientists Lunch, White House ('85)

R.R. Bensely Award (American Association of Anatomists, '88)

Searle Scholar Alumnus Award Lecture ('91)

NIH Merit Award ('93-'03)

Montagna Award (Society for Investigative Dermatology, '95)

Keith Porter Lecture (American Society for Cell Biology '96)

Senior Women's Career Achievement Award (American Society for Cell Biology '97)

Harvey Lecture (Rockefeller University, '99)

Convocation Address University of Chicago ('99)

Hermann Pinkus Memorial Lecture Award (American Academy of Dermatopathology, '00)

*Richard Lounsbery Award (National Academy of Sciences, '01).

Rockefeller University. 2002-present:

Cartwright Prize (Columbia University, '02)

Cruikshank Memorial Lecturer (Gordon Research Conferences on Cell Adhesion, '02)

Novartis Award in Biomedical Research (shared with P. Sharp and D. Botstein, '03)

Distinguished Visiting Scientist (Singapore, '04)

*Dickson Prize in Medicine ('04)

FASEB Award for Scientific Excellence ('06)

Beerling Award ('06)

Lecturer, College de France (by Invitation of the Assembly of Professors, '08)

Rothschild-Yvette-Mayent Visiting Scholar of the Institut Curie ('08)

NIH MERIT Award ('09-)

*** National Medal of Science (Awarded by President Barak Obama, '09)

Distinguished Investigator Award (Emerald Foundation, '10)

Visiting Scholar of Phi Beta Kappa ('10)

AACR-WICR Charlotte Friend Award ('10)

**L'Oreal UNESCO Award For Women in Science ('10)

Convocation Address University of Illinois ('10)

Madison Medal (Princeton University '11)

Passano Award ('11)

**Albany Prize in Medicine ('11)

Rockefeller University Teaching Award ('12)

New York Academy of Medicine (Basic Sciences and Medicine Award, '12)

*March of Dimes Prize in Developmental Biology ('12)

Lifetime Achievement Award (American Skin Association '13)

Kligman-Frost Leadership Award (Society of Investigative Dermatology '13)

*Pasarow Award for Cancer Research ('13)

**Pezcoller Award for Cancer Research ('14)

Convocation Address Albany Medical College ('15)

*EB Wilson Award (American Society of Cell Biology '15)

*Vanderbilt Prize ('17)

Ricketts Award (U of Chicago, '17)

**McEwen Award for Innovation (International Society for Stem Cell Research, '17).

*Commissioned Portrait: Princeton University's Hall of Distinguished Alumni ('19)

*G. H. A. Clowes Award (AACR, '19)

2019 Princess Takamatsu Lecturer in Japan

*Bloch Award for Cancer Research (Ohio State University, '19)

***Gairdner International Award ('20)

EW Bertner Memorial Award (MD Anderson Cancer Ctr '21)

Bert & Natalie Vallee Award in Biomedical Science (ASBMB, '22)

Shacknai Award in Immunology and Cancer Research (Hebrew University, '22)

**Benjamin Franklin Medal in Life Sciences ('23)

John J Ryan Medal ('24)

*Memorial Sloan Kettering Medal ('24)

Elected to Honorary Societies:

*American Academy of Arts and Sciences ('94)

**National Academy (Institute) of Medicine ('94)

***National Academy of Sciences ('96)

Fellow, American Academy of Microbiology ('97)

Honorary member of the German Society of Dermatology ('01)

The Harvey Society ('04)

Fellow, New York Academy of Sciences ('04)

**American Philosophical Society ('05)

Fellow, American Association for the Advancement of Science ('08)

*EMBO Foreign Member (equivalent of the European National Academy of Sciences) ('10)

*Academy of the American Association for Cancer Research ('13).

Academy of the American Society for Cell Biology ('16).

**Pontifical Academy of Sciences (appointed by Pope Francis, '18)

National Academy of Inventors ('19)

***Royal Society foreign member ('19)

Foreign corresponding member, Royal Academy of Medicine of Belgium ('24)

HONORARY/NAMED LECTURES, KEYNOTE ADDRESSES, PLENARY LECTURES, SEMINARS (2018-24):

Honorary/Named Lectures

2018

Naidorf (Columbia U)

Gould (Rutgers)

Distinguished (NIEHS)

Nicholson (Karolinksa)

McClintock (CSHL)

2019

Max Birnsteil (IMP, Vienna)

Princess Takamatsu Lectureship in Cancer Research (Tokyo, Hokkaido U, Kyoto U)

AACR AHG Clowes Lect; Kewaunee (Duke)

Max Delbruck Centeru (Berlin)

Bloch Mem Award Lecture (Ohio State)

2020

Milstein (Cambridge UK, MRC)

Gairdner National (Montreal)

Gairdner PhD Student (Montreal)

Gairdner Intl Award Lecture (U Toronto)

William Barr (Western Ontario U);

Wilkins Professorship (Boston U)

Woese (U Ill)

Breaking News (UCSD)

2021

Ashley Dunn Oratory (Lorne Cancer Ctr, Australia)
Parker (Columbia); Mihich (Roswell Park)
EW Bertner (MD Anderson)
EMBO Women in Science (Spetses)

2022

Rennels Distinguished Lect (UT San Antonio)
Chipperfield (MIT)
Distinguished (Northwestern)
Shacknai Award Lecture (Nazareth)
Leland Cheung Lecture (SBUR)

2023

Distinguished Lecture in Cell and Developmental Biology (NIH)
Vallee Foundation Lecture (WEHI Institute, Melbourne)
Ben Franklin Institute Medal Lecture (U Penn)
EMBO Lecture, Stem Cells and Cancer Gordon Research Conference
Stilliman Lecture (Yale)
Distinguished Lecture, Institute of Bioengineering and Biosciences (Georgia Tech)

2024

Kroc Lecture (Dept Cell Biology Harvard Medical School)
John Jay Ryan (Royal College Surgeons Ireland)
Baxter Lect. (Stanford)
Huck Lecture (Penn State)
Convocation Address (MSK)
Ernest McCulloch Memorial Lecture (International Society for Stem Cell Research Annual Meeting, Hamburg, DE)
EMBO Women in Science Lecture (Spetses).

Keynote Addresses at Scientific Meetings

2018

Gordon Research Conference, Stem Cells and Their Niches
Harvard Epigenetics Symposium
DFKZ Symposium on Cancer & Stem Cells (Heidelberg)
ASCB Stem Cells Under Stress
Yale Immunobiology Retreat
Alopecia Areata Annual Meeting

2019

Gordon Research Conference, Stem Cells & Cancer
Gordon Research Conference, Epithelial Biology
Cancer & Metastasis Keystone Symposium (Florence)
UNM Res Day
Forum on Regenerative Medicine (NYAS and National Academy of Sciences)
Regional Developmental Biology Meeting Woods Hole, Champlimaud Symposium (Lisbon)

2020

Genetics Society of America Annual Meeting
Res Day (Dalhousie Univ)

2021

FASEB TGF β Superfamily in Development and Disease
ISSCR Annual Meeting: President's Symposium International Conference of the Korean Society for Molecular and Cell Biology (Seoul)
Singapore Ann Dermatology Society
Stem Cells & Cancer Symp (Barcelona)
Sanford Stem Cell Symposium (UCSD)
Cambridge UK Stem Cell Institute Student Ret (Cambridge)
CRC Symposium (Koln)

2022

American Society of Biochemistry & Molecular Biology (Philadelphia)
Human Cell Atlas Meeting (Vienna)
Stem Cells Student Symposium (U Toronto)
Mina Bissell Symposium (Weil Cornell)
Rutgers Cancer Institute Annual Retrea
Wound Healing Symposium (IWH)

2023

Digestive and Liver Disease Center Symposium (Columbia U)
Metastasis and Cancer Symposium (Columbia U)
NYC Skin Symposium

2024

CORT Symposium (UTSW)
Pezcoller Cancer Symposium (Trento Italy)
SUHF Symposium (Seoul)
European Society of Dermatological Research (Lisbon)

Plenary Lectures**2018**

American Association for Cancer Research Annual Meeting
Les Treilles (France),
Translational Medicine (U Penn)
Mechanotransduction Symposium (Singapore)
Cancer Symposium (Singapore)

2019

Usha Mahajani Symposium (Salk Inst.)
Gordon Research Conference, Epithelial Biology
Boston Children's Hosp 15th Annual Stem Cell Symposium (Harvard Med School)

2020

AACR Regional Meeting (San Diego)
Canada Stem Cell Meeting (Vancouver)
ISSCR Ann Meeting Plenary Symposium

2021

National Academy of Future Phys and Med Students Symposium
Gairdner Symposium for MD/PhD Students, Starr Cancer Symposium
American Phys Society
Cell Press and Westlake Univ Cancer Cell Plasticity Symposium (China)
World Laureates Forum (China)

2022

Amer Society of Clinical Invest (Webinar)
TERMIS (Netherlands)
Vatican Workshop on Stem Cells
Keystone Meeting: Innate Immune Memory (Banff)
Vallee Scholars Meeting (Lisbon)
AACR Meet the Experts (New Orleans)
Frontiers in Stem Cell Biology Meeting (Dead Sea, Israel)
Gairdner Stem Cell Symposium (U Calgary)

2023

sLorne Cancer Symposium (Australia)
Gordon Research Conference, Epithelial Biology (Spain)
Cold Spring Harbor 87th Symposium in Quantitative Biology: Stem Cells
Stem Cells Conference (Les Treilles)
CSHL Metastasis and the Tumor Microenvironment

Regular Seminars

2018-2019:

Harvard Med School	Cancer Ctr (Harvard Med Sch)
Univ of Virginia	Univ Vienna Cancer Inst
New York Univ,	Univ Toronto, INSERM (Marseilles)
Yale Univ	Crick Inst (London),
Columbia Univ	IRB Barcelona, Calico
MD Anderson,	Toronto Derm Soc
Ohio State Univ	Case Western Reserve Univ
Johns' Hopkins Univ	Wash U
Stanford Univ	UC Irvine
Rockefeller Univ	UC Berkeley
Univ of Illinois Chicago	UCSD
National Institutes of Health	Mt. Sinai School of Med
CSHL	UCSF
Thomas Jefferson Univ	Buck Inst
Max Planck Institute (Dresden, Freiburg)	Surrozen

2020

Gurdon Inst Cambridge	Univ Illinois at Chicago
Burnham Cancer Inst	Univ College London
Scripps Cancer Inst	Netherlands Cancer Inst
MD Anderson Cancer Biol Series	Dana Farber/Harvard U Cancer Ctr
Grand Rounds at Cancer Ctr, Ohio State U	Univ Illinois Urbana
Mechanobiology and Gene Expression Seminar Series (International)	UCSD Breakthrough Webinar

2021

MUSC	Regeneron
Rockefeller Univ Monday Lecture	Laval Univ
U Washington	Univ Ottawa
Intl Intermediate Filament Webinar Series	Gordon Research Conference Lectures in Skin Biology
Leuven VIB-Univ Brussels	Intl Mechanobiology Series
Regeneron, Gladstone Inst/UCSF	

2022

UCLA
UC Irvine
Univ Virginia
Weizmann Institute
La Jolla Immunology Institute

2023

Murdoch Children's Research Institute (Melbourne)
SNF Institute for global infectious diseases (Rockefeller)
Stem Cell Faculty Forum (MSKCC)
Northwestern University
UCSD Institute for Regenerative Medicine

2024

UCSF Immunology
Genentech
Broad Institute, Harvard Dept Genetics
KAIST

NATIONAL/INTERNATIONAL COMMITTEES/ADMINISTRATIVE RESPONSIBILITIES:**Presidents of Societies**

American Society for Cell Biology ('01)
Harvey Society ('07)
International Society for Stem Cell Research ('10)

Editorial Positions

Editorial Board, *Journal of Cell Biology*, '88-'92; *Academic Editor, *Journal of Cell Biology* ('93-)
Special Advisory Editor, *Journal of Clinical Investigation* ('92-'98)
Editorial Board, *Genes and Development* ('00-)
Editorial Board, *Developmental Cell* ('01-)
Editorial Board, *Cell* ('01-)
Editorial Board, *Cell Stem Cell* ('07-)
Editorial Board *ELife* ('12-)

Board of Trustees and Board of Directors

Board of Trustees Cold Spring Harbor Laboratories ('19-)
International Society for Stem Cell Research Board of Scientific Directors ('06-16); Executive Committee ('08-'12)
American Association for Cancer Research Board of Directors ('20-'23)
New York Academy of Sciences Board of Governors ('11-'20)
Damon Runyon Cancer Foundation ('02-)
Founding Board Member of the Rosalind Franklin Society

Scientific Advisory or Review Boards**Past:**

Searle Scholar Review Board ('93-'95)
Chair, Searle Scholar Review Board ('96-'98)
Recruitment Board, Stower's Institute ('98-'00)

Burroughs Welcome Young Investigator Review Board ('98-'05)
Scientific Advisory Board, RIKEN Developmental Biology Institute, Kobe, Japan (01-'06)
Scientific Advisory Board, Whitehead Institute ('03-'09)
Scientific Review Board, Jane Coffin Childs Foundation ('03-'15)
Scientific Review Board Cell Biology, Weizmann Institute, November ('05)
Scientific Advisory Board, Sirna Pharmaceutical Company ('05-'07)
Scientific Advisory Board, CBRI Institute for Biomedical Research, Harvard Med ('06-'12)
External Advisory Board, NYU ('08)
Scientific Advisory Board, Johnson & Johnson ('10-13)
Scientific Advisory Board MIT ('09-'16)
Scientific Advisory Board, Sick Kids University of Toronto ('17)
Scientific Review Board VIB, Belgium ('10, '20),
Scientific Advisory Board, Sackler Foundation ('15-17)
Investigator Council, Howard Hughes Medical Institute ('18-'20)
Scientific Advisory Board, University of Utah Cancer Center ('12-'22)
Scientific Advisory Board, L'Oreal ('13-'20).
Scientific Advisory Board, Arsenal Biosciences ('18-'22)

Current:

Scientific Advisory Board, IMBA Vienna ('12-); Chair of the Board ('18-)
Scientific Advisory Board, Northwestern Skin Center ('15-)
Scientific Advisory Board, Massachusetts General Hospital, Harvard Medical School ('17-)
Scientific Advisory Board, University of Cambridge Cancer Center CRUK ('18-)
Scientific Advisory Board, Klarman Cell Observatory, Broad Institute ('18-)
Sanford Stem Cell Institute UCSD ('23-)
Scientific Advisory Board, Cancer Institute, Lyon ('24-)

Award Committees:

General Motors Foundation Awards ('04-'06)
Selection Committee, Richard Lounsbery Award, NAS ('97, '10); Chair ('05)
Pezcoller Foundation Award ('07) and ('10)
Chair, AACR OAR/Clowes Awards ('08)
Jury L'Oreal-UNESCO Award ('11)
Albany Prize Selection Committee ('13-)
Blavatnik Awards Selection Committee ('13); Chair Life Sciences ('18-'20)
Vallee Foundation Scholars ('15-'23)
Janssen Prize, 2022-; Chair ('23-)

Elected Posts:

American Society for Cell Biology, Council ('89-'92)
National Academy of Sciences, Council ('01-'04)
Class II Membership Committee ('05, '08)
American Association for Cancer Research, Regional AACR Transcription Meeting Organizing Committee (94, '97)
Nominating Committee (07-)
AACR Takamatsu Memorial Lectureship Committee ('16)
Fellow of the AACR Academy ('16-)
Chairperson, Clarkson Symposium ('17)
AACR Academy Steering Committee ('19-)
Board of Directors AACR ('20-'23)
National Academy of Medicine, Council ('14-'18)

Appointed Posts:

Correspondent, NAS Committee on Human Rights ('95-)
Program Committee, ASBMB International Meeting ('95)
Nominating Committee, ASBMB, ('91, '94); Chair ('95)
ASCB Program Committee ('89, '92, '08, '15)
Special Reviewer: Ad-hoc, NIH site visits, and postdoctoral fellowships ('85-87)
Nominating Committee, ASCB, '92; Chair ('94)
Program Committee, ASCB International Meeting ('96, '97)
Vice-Chair and Chair, Epithelial Biology Gordon Research Conference ('99, '01)
Chair, Molecular Cell Biology Gordon Research Conference ('99)
Co-chair, Keystone Symposium on the Cytoskeleton ('00)
ASCB Program Committee ('09); Nominating Committee ISSCR ('11)
Committee Human Rights of the NYAS ('11-)
Advisory Workshop to the Vatican on Stem Cells (Vatican City, '12)
ASCB Committee to Prepare a "White Paper" advising NIH on prioritizing funding initiatives for stem cell research ('13)
Vanderbilt Prize Selection Committee ('18-)
Vallee Foundation Scholar's Program ('18-)
Program Chair ISSCR Annual Meeting ('17)
Program Committee ISSCR Annual Meeting ('21)

National Institutes of Health, National Cancer Institute, Advisory Council, Scientific Review Panels, Study Sections

Physiological Chemistry Study Section ('83-86)
Advisory Council to the NIH Director, Dr. Harold Varmus ('96-'00)
Scientific Review Panel to review the Intramural Program at NIAMS ('97)
Scientific Review Panel RFA on Cancer Stem Cells ('08)
NIH Special Grant Review Panel ACTS, NIAMS ('08)
Scientific Special Review Panel, President's Stimulus Package Challenge Grants, '09
RFA CA-11-011 and 012 "Research Answers to Provocative Questions" Study Section, National Cancer Institute ('11)
NIH K-Awards Young Investigator Review Panel ACTS, NIAMS ('16)
HHMI Investigator Review ('16, '20)
Special Review Panel NIAMS ('19, '21)
Chair, Visiting Committee to Review Harvard University's Department of Stem Cell and Regenerative Biology ('24)

UNIVERSITY ADMINISTRATIVE EXPERIENCE:**The University of Chicago:****University-Wide**

Council of the Senate ('87-'90)
President's Committee to Develop a 5 Yr Plan of Intellectual & Financial Priorities ('87)
University Disciplinary Committee ('96-'02)
Council on Research ('97-'02)
Interdivisional Building Committee ('00-'02)

Divisional

Chair, Committee to Reorganize the Basic Sciences within the Division of Biological Sciences ('94-'95)
Dean's Advisory Committee to Set Priorities for Division of Biological Sciences ('96-'02)
Chair, ACS Institutional Research Grant Committee ('85-'90)
PI, Cancer Biology Training Grant ('88-'02)
PI, Molecular Biology Section, NIH Cancer Center Grant ('90-'02)
Executive Committee, Cancer Center ('91-'02)
Steering Committee, Cancer Biology Committee ('96-'02)
Chair, Curriculum Committee for Developmental Biology ('98-'02)
Chair, Senior Cell Biology Search Committee ('00-'02)

Departmental

Graduate Admissions Committee, MGCB ('88-'93)
Faculty Recruitment Committee: BMB and MGCB ('84-93)
Chair, MGCB ('93, '96)
Chairman's Advisory Committee (MGCB) ('92-'02)
Promotions and Appointments Committee (MGCB) ('92-'95)
Curriculum Committees, MGCB, BMB ('95-'02)

The Rockefeller University:

Friday Lecture Series Committee Chair ('03-'05, '23-)
Executive Committee of the Academic Council ('03-'06)
Tri-Institutional Stem Cell Institute Initiative ('04-)
Faculty Recruitment Committee Chair ('05-'06)
Honorary Degree Committee ('07-)
Faculty Budget Advisory Committee ('09)
Women in Science Breakfast Speaker ('13,'18)
Women in Science Annual Luncheon Speaker ('14, '23)
Postdoctoral Fellowship Awards Committee Chair ('10-'14)
Lecture Policy Committee Chair ('12)
Faculty Recruitment Committee ('12-)
MidCareer Hiring Committee ('13-)
Nominating Committee, Nicholson Lect ('19-)
Executive Committee of the Academic Council ('11-'14)
Chair of the Academic Council and Senate ('13-'14)
Academic Council ('19)
Organizer and Founder, Rockefeller University Retreat on Stem Cells ('15-)

TEACHING:

Graduate Molecular Biology II: Eukaryotic Gene Expression: MGCB 313, Univ. Chicago ('81-'95)

Graduate Advanced Cell Biology I: MGCB 316, Univ. Chicago ('95-'02)

Invited Lecturer:

Cell Physiology Course, Woods Hole, MA ('87-'89)
Cell Biology Course, Northwestern Med. School ('87-'90)
Cell Biology Course, Harvard University ('88)
Philips Lecturer, Haverford College ('92)
Storer Life Science Lectureship, University California Davis ('95)
Stem Cell Course at Cold Spring Harbor ('04)

Graduate Cell Biology (team-taught), Sloan Kettering/Cornell Medical School (04-)

Graduate Cell Biology guest lecturer, Rockefeller University ('04-)

Graduate Developmental Biology guest lecturer, Rockefeller University ('10-'15)

[College de France, Paris \(Jan '08\)](#)

Graduate Stem Cells in Tissue Morphogenesis and Cancer Course, Rockefeller University (received Rockefeller Teaching Award for this course, '11; co-taught w/Ali Brivanlou); ('09-)

Graduate Course in Human Genetics guest lecturer, Rockefeller University ('17, '19, '21, '23)

International Delegation to Provide Career Education to Top High School Students in China, ('12)

Graduate Course in Developmental Biology, EMBO Lecture for Women in Science, Spetsai, Greece ('16; '21; '24)