Name: Ibrahim Cissé
Date of birth, Nationality: USA and Niger

Institution: Max Planck Institute of Immunobiology & Epigenetics
Contact: 0761 5108 422, cisse@ie-freiburg.mpg.de
Position: Director

Academic education including academic degrees

Ph.D., Physics, University of Illinois at Urbana-Champaign, 2009,

Thesis Advisor: Taekjip Ha

Thesis titled: “Single Molecule Study of Weak and Transient Biological Interactions”

M.S., Physics, University of Illinois at Urbana-Champaign, 2005

B.S., Physics, North Carolina Central University, 2004

Scientific graduation

Employment

Max Planck Institute of Immunobiology & Epigenetics
Director, 2021- Present
(By Courtesy) Faculty of biology, University of Freiburg
Professor 2023-Current

Department of Physics, California Institute of Technology (Caltech)
Full Professor of Physics, 2021

Department of Physics & Department of Biology, MIT
Associate Professor of Physics with Tenure, 2020-Present
Associate Professor of Physics, 2019-2020

Department of Physics, Massachusetts Institute of Technology,
Associate Professor of Physics, 2019-Present
Assistant Professor of Physics, MIT, 2014- 2019

HHMI Janelia Research Campus,
Research Specialist, Howard Hughes Medical Institute, 2013-2014

Departments of Physics, and Biology, Ecole Normale Superieure de Paris
Post-doctoral fellow, Ecole Normale Superieure, 2010-2012

Other activities, awards and honours

<u>Honors:</u>

MacArthur Fellow, 2021

Fellow, The American Physical Society (APS-Physics), elected in 2021
The Vileck Prize for Creative Promise in the Biomedical Sciences, 2020
Everett Moor Baker Award for Excellence in Undergrad Teaching, 2019
Next Einstein Fellow, African Institute of Mathematical Sciences, 2019
Science News (SN10), Scientists To Watch List, 2018
Young Fluorescence Investigator Award, Biophysical Society, 2017
PEW Biomedical Scholar, The PEW Charitable Trust, 2017
The Class of 1922 Chair Professorship, MIT, 2016
The James H. Ferry Jr. Fund for Innovation in Research, MIT, 2015
NIH Director's New Innovator Award, 2014
Scialog® Fellow (Funded) Research Corporation & Moore Foundation, 2014
Longterm Fellow, European Molecular Biology Organization, 2011
Fellow, Foundation Pierre Gilles de Gennes, 2010
Division of Laser Science research award, American Physical Society, 2008
LeRoy Apker Award Finalist, American Physical Society, 2004

Ten most important publications

1. Light-induced targeting enables proteomics on endogenous condensates. Lee C, Quintana A, Suppanz I, Gomez-Auli A, Mittler G, **Cissé II**. **Cell.** 2024 Dec 12;187(25):7079-90.

2. Direct observation of a condensate effect on super-enhancer controlled gene bursting. Du M, Stitzinger SH, Spille JH, Cho WK, Lee C, Hijaz M, Quintana A, **Cissé II**. **Cell.** 2024 Jan 18;187(2):331-44
3. RNA-Mediated Feedback Control of Transcriptional Condensates. Henninger JE, Oksuz O, Shrinivas K, Sagi I, LeRoy G, Zheng MM, Andrews JO, Zamudio AV, Lazaris C, Hannett NM, Lee TI, Sharp PA, **Cissé II**, Chakraborty AK, Young RA. **Cell**. 2021 Jan 7;184(1):207-225.e24.
4. Pol II phosphorylation regulates a switch between transcriptional and splicing condensates. Guo YE, Manteiga JC, Henninger JE, Sabari BR, Dall'Agnese A, Hannett NM, Spille JH, Afeyan LK, Zamudio AV, Shrinivas K, Abraham BJ, Boija A, Decker TM, Rimel JK, Fant CB, Lee TI, **Cisse II**, Sharp PA, Taatjes DJ, Young RA. **Nature**. 2019 Aug;572(7770):543-548.
5. A first order phase transition mechanism underlies protein aggregation in mammalian cells. Narayanan A, Meriin A, Andrews JO, Spille JH, Sherman MY, **Cisse II. Elife**. 2019 Feb 4;8. pii: e39695.

6. Mediator and RNA polymerase II clusters associate in transcription-dependent condensates. Cho WK, Spille JH, Hecht M, Lee C, Li C, Grube V, **Cisse II**. **Science**. 2018 Jul 27;361(6400):412-415.
7. qSR: a quantitative super-resolution analysis tool reveals the cell-cycle dependent organization of RNA Polymerase I in live human cells. *Andrews JO, Conway W, Cho W-, Narayanan A, Spille J-, Jayanth N, Inoue T, Mullen S, Thaler J, **Cissé II**. **Scientific Reports.** 2018 May 9;8(1):7424.
8. Super-resolution imaging of fluorescently labeled, endogenous RNA Polymerase II in living cells with CRISPR/Cas9-mediated gene editing. Cho WK, Jayanth N, Mullen S, Tan TH, Jung YJ, **Cissé II**. **Scientific Reports.** 2016 Oct 26;6:35949.
9. RNA Polymerase II cluster dynamics predict mRNA output in living cells. Cho WK, Jayanth N, English BP, Inoue T, Andrews JO, Conway W, Grimm JB, Spille JH, Lavis LD, Lionnet T, **Cisse II. Elife**. 2016 May 3;5. pii: e13617.
10. Real-time dynamics of RNA polymerase II clustering in live human cells. **Cisse II,** Izeddin I, Causse SZ, Boudarene L, Senecal A, Muresan L, Dugast-Darzacq C, Hajj B, Dahan M, Darzacq X. **Science**. 2013 Aug 9;341(6146):664-7.