

## Curriculum Vitae:

Anthony A Hyman

Position	Institute Director
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Website	<a href="https://hymanlab.org">https://hymanlab.org</a>

### Education:

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1984	University College London	BSc first class Zoology
1988	King's College Cambridge	PhD Molecular Cell Biology

### Professional Experience:

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1985 - 1987	PhD at the LMB, MRC, Cambridge	Mentor John White.
1988 - 1992	Postdoctoral Research: UCSF, CA	Mentor Tim Mitchison.
1993 - 1997	Group Leader: EMBL, Heidelberg	
1997 -	Director, MPI-CBG Dresden	
2010 - 2013	Managing Director, MPI-CBG	

### Trainees

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For details see [https://hymanlab.org/hyman\\_lab/people/](https://hymanlab.org/hyman_lab/people/)

Number of postdoctoral fellows trained: 37

Number of students trained: 21

### Selected trainees

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Pierre Gonczy	Full professor, EPFL Lausanne CH
Karen Oegema	Full professor UCSD, San Diego USA
Arshad Desai	Full professor UCSD, San Diego USA
Michael Glotzer	Full professor UCSD, Chicago, USA
Nurhan Ozlu	Associate Professor, Koç university TR
Carie Cowan,	Director of education, Santa Fe Institute, USA
Laurence Pelletier	Senior investigator, Lunenfeld Institute CA
Cliff Brangwynne	Full Professor Princeton University, USA
Simone Reber	Group Leader, Humboldt university, Berlin DE
Kate Lee	Assistant Professor, University of Toronto CA
Emma Filippidi	Assistant Professor, University of Crete GR

## Honors and Awards:

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2000	EMBO member
2002	Honorary Professor TUD Dresden
2003	EMBO Gold Medal
2007	Norman Heatley Lecture, Sir William Dunn School, UK
2007	Elected fellow of the Royal Society
2011	Gottfried Wilhelm Leibniz Prize
2017	German National Academy of Sciences, Schleiden Medal
2017	Lifetime Fellow of the American Society for Cell Biology
2019	Carl Zeiss Lecture for outstanding achievements in cell biology
2020	Wiley prize for Biomedical research
2020	Elected international member National Academy of Sciences
2020	ASCB Keith Porter lecture
2021	Nakasone award, HFSP

## Selected Professional Service and Advisory Boards:

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2007 - 2016	<b>Chair</b> , SAB Institute of (IMBA), Vienna, Austria
2014 - 2020	<b>Chair</b> , SAB of the NNF Center for Protein Research, Denmark.
2014 - 2017	<b>Council Member</b> , American Society of Cell Biology (ASCB)
2014 - 2020	<b>Scientific Advisory Council</b> , EMBL Heidelberg.
2013 -	<b>Member</b> , Academic Research Council, Singapore
2017 - 2020	<b>Chair</b> , Wellcome Trust Strategy committee.

## Selected meetings organized

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2012	<b>Program Chair</b> , American Society of Cell Biology, Annual Meeting
2013	<b>Co-chair</b> . Annual meeting, European Molecular biology organization
2018	<b>Organizer</b> , Inaugural Keystone Symposium, Biomolecular Condensates
2018	<b>Co-Organizer</b> . Solvay conference on physics
2019	<b>Organizer</b> , inaugural EMBO practical course on phase separation

## Other activities

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2007-2012	<b>Elected member</b> of foreigners council, City of Dresden
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2005-           **Chair**, board of governors, Dresden International School  
2017-2020      **Advisory board**, Dresden city council, city of culture application

Selected invited lectures and Plenary talks (since 2015):

2015    Keynote lecture:       Phase Transition Meeting, Princeton University, USA  
2015    Invited lecture:         "Publish and Perish?" Seminar, Royal Swedish Academy of Sciences,  
2015    Plenary Talk:             ASCB Meeting 2015, San Diego, USA  
2016    Keynote lecture:         Mesoscopic Biology Colloquium, Paris Sciences et Lettres  
2016    Keynote lecture:         PhD Symposium, Biozentrum of the University of Basel  
2016    Szent-Györgyi talk:      Woods Hole Marine Biological Laboratory,  
2016    Plenary lecture:         Joint Meeting of the Society for Developmental Biology  
2016    EMBO Keynote:            Young Investigators Meeting, Goa, India  
2017    Keynote lecture:         University Medical Centre, Geneva,  
2017    D. Thomas Lecture:      CRC Symposium, St. Jude's. Memphis, USA  
2017    Career lecture:          Centrosome and Spindle Pole Body Conference, Heidelberg  
2017    Distinguished Lecture    CRUK, Cambridge Institute, UK  
2018    Keynote lecture:         The British Society for Cell Biology 2018 meeting  
2018    Keynote lecture:         Mechanisms Driven by Liquid Phase Separation, Heidelberg,  
2018    Landmark lecture:        Microtubules: From Atoms to Complex Systems, Heidelberg,  
2018    Friday lecture:          Rockefeller University New York  
2018    Keynote Lecture:         IMBA/IMP Recess, Vienna  
2018    Keynote Lecture:         Frontiers in Biology Seminar Series, Rennes  
2018    Keynote Lecture:         2018 Max Planck Epigenetics Meeting, Freiburg  
2019    Invited lecture:         Chan-Zuckerberg Bio hub, San Francisco  
2019    Colloquium Lecture:      Weizmann institute of science, Rehovot  
2019    Chiron Lectures:         University of California. Berkeley  
2019    Special lecture          Annual meeting, society of neuroscience, Chicago  
2020    Keith Porter lecture     2020 American Society of Cell Biology meeting

## Selected recent publications

A full list of publications can be found in google scholar under: [Hyman, AA](#)

- 1) Brangwynne, CP; Eckmann, CR; Courson, DS; Julicher F and Hyman, AA, (2009). Germline P Granules Are Liquid Droplets That Localize by Controlled Dissolution/Condensation. **Science** 324(5935); 1729-1732

- 2) Brangwynne, CP; Mitchison, TJ; Hyman, AA (2011). Active liquid-like behavior of nucleoli determines their size and shape in *Xenopus laevis* oocytes. **PNAS**: 108(11): 4334-4339
- 3) Hyman AA, Weber CA, Jülicher F. (2014). Liquid-liquid phase separation in biology. **Annu Rev Cell Dev Biol**: 30:39-58.
- 4) Woodruff JB, Wueseke O, Viscardi V, Mahamid J, Ochoa SD, Bunkenborg J, Widlund PO, Pozniakovsky A, Zanin E, Bahmanyar S, Zinke A, Hong SH, Decker M, Baumeister W, Andersen JS, Oegema K, Hyman AA. (2015). Centrosomes. Regulated assembly of a supramolecular centrosome scaffold in vitro. **Science**: 348(6236):808-12.
- 5) Patel A, Lee HO, Maharana S, Jawerth L, Jahnel M, Saha S, Pozniakovski A, Poser I, Stoynow S, Myers E, Drechsel D, Grill S, Hyman AA\* and Alberti S\*. (2015). A liquid to solid phase transition of the ALS protein FUS accelerated by disease mutation. **Cell**: 162(5):1066-77.
- 6) Saha S, Weber CA, Nusch M, Adame-Arana O, Hoege C, Hein MY, Osborne-Nishimura E, Mahamid J, Jahnel M, Jawerth L, Pozniakovski A, Eckmann CR, Jülicher F, Hyman AA. Polar Positioning of Phase-Separated Liquid Compartments in Cells Regulated by an mRNA Competition Mechanism. **Cell**. 2016 Sep 8;166(6):1572-1584.e16.
- 7) Woodruff JB, Ferreira Gomes B, Widlund PO, Mahamid J, Honigmann A, Hyman AA. The centrosome is a selective condensate that nucleates microtubules by concentrating tubulin. **Cell**. 2017 Jun 1;169(6):1066-1077.e10.
- 8) Hernández-Vega A, Braun M, Scharrel L, Jahnel M, Wegmann S, Hyman BT, Alberti S, Diez S, Hyman AA. Local nucleation of microtubule bundles through tubulin concentration into a condensed tau phase. **Cell Rep**. 2017 Sep 5;20(10):2304-2312.
- 9) Patel A, Malinowska L, Saha S, Wang J, Alberti S, Krishnan Y, Hyman AA. ATP as a biological hydrotrope. **Science**. 2017 May 19;356(6339):753-756.
- 10) Banani SF, Lee HO, Hyman AA\*, Rosen MK\* (2017). Biomolecular condensates: organizers of cellular biochemistry. **Nat Rev Mol Cell Biol**. Feb 22.
- 11) Titus Franzmann, Marcus Jahnel, Andrei I. Pozniakovsky, Julia Mahamid, Alex S Holehouse, Elisabeth Nüske, Doris Richter, Wolfgang Baumeister, Stephan W. Grill, Rohit V Pappu, Anthony A. Hyman\*, Simon Alberti\* (2018) Phase separation of a yeast prion protein promotes cellular fitness. **Science** 359(6371) Art. No. eaao5654
- 12) Wang J, Choi, J-M, Holehouse AS, Lee, HO, Zhang X, Jahnel, M, Maharana, S, Lemaitre, R, Pozniakovsky A, Drechsel D, Poser I, Pappu RV, Alberti, S\* Hyman AA \*(2019). A molecular grammar governing the driving forces for phase separation of prion-like RNA binding proteins. **Cell**, 174(3):688-69.
- 13) Klosin A, Oltch F, Harmon T, Honigmann A, Jülicher F, Hyman AA\*, Zechner C\*. (2020) Phase separation provides a mechanism to reduce noise in cells. **Science**. 2020 Jan 24;367(6476):464-468