

CURRICULUM VITAE

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Date of Birth: December 22, 1955 in Göttingen, Germany

Nationalities: U.S.A. and Germany

Biographies: http://www.nobelprize.org/nobel_prizes/medicine/laureates/2013/sudhof-bio.html;
https://en.wikipedia.org/wiki/Thomas_C._Südhof

Education:

1975-1977 University of Aachen Medical School
1977-1982 University of Göttingen Medical School
1979 Visiting Student at Harvard Medical School
1978-1981 Assistant Scientist, Max-Planck-Institut für biophysikalische Chemie in Göttingen
1981-1982 Internship at the University Hospital of Göttingen

Degrees:

1982 Licensing as a medical doctor
1982 Recipient of 'Dr. med.' degree; doctoral thesis: "The biophysical structure of chromaffin granules" (mentor: Dr. V. P. Whittaker)

Positions:

1982-1983 Postdoctoral Fellow, Max-Planck-Institut für Biophysikalische Chemie, Göttingen, Germany (mentor: Dr. V. P. Whittaker)
1983-1986 Postdoctoral Fellow, Dept. of Molecular Genetics, UT Southwestern Medical Center at Dallas, Texas (mentors: Drs. M.S. Brown and J.L. Goldstein)
1986-1989 Assistant Investigator, Howard Hughes Medical Institute at Dallas, UT Southwestern
1987-1989 Assistant Professor, Dept. of Molecular Genetics, UT Southwestern
1989-1991 Associate Professor, Dept. of Molecular Genetics, and Associate Investigator, Howard Hughes Medical Institute, UT Southwestern
1991-2008 Professor, Dept. of Molecular Genetics, UT Southwestern Medical Center at Dallas
1991-present Investigator, Howard Hughes Medical Institute
1995-2008 Gill Distinguished Chair in Neuroscience Research, UT Southwestern
1995-1998 Director, Abt. Molekulare Neurobiologie, Max-Planck-Institut für experimentelle Medizin; Göttingen, Germany, and Scientific Member of the Max-Planck-Society
1999-2001 Chair, Graduate Program in Neuroscience, UT Southwestern
1997-2008 Lloyd B. Sands Distinguished Chair in Neuroscience, UT Southwestern
1997-2006 Director, Center for Basic Neuroscience, UT Southwestern
2007-2008 Chair, Dept. of Neuroscience, UT Southwestern
2008-2018 Adjunct Professor of Neuroscience, UT Southwestern
2008-present Avram Goldstein Professor, Depts. of Molecular & Cellular Physiology and of Neurosurgery; by courtesy, Depts. of Neurology and of Psychiatry & Behavioral Sciences, Stanford University School of Medicine (SUSM)
2015-present Director, Center for Molecular Neuroscience in Health and Disease, SUSM
2021-present Member, Institute for Stem Cell Biology and Regenerative Medicine, SUSM

Honors and Awards:

1993 W. Alden Spencer Award from Columbia University (shared with Richard Scheller)

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| 1994 | Wilhelm Feldberg Award |
| 1997 | Roger Eckert Award Lecture, Göttingen |
| 1997 | U.S. National Academy Award in Molecular Biology (shared with Richard Scheller) |
| 2000-2010 | 1 st Merit Award, NIMH |
| 2004 | Ulf von Euler Lecture Award, Karolinska Institutet |
| 2004 | MetLife Award in Alzheimer's Disease Research (shared with Roberto Malinow) |
| 2004 | Bristol-Myers Squibb Award for Distinguished Achievement in Neuroscience Research |
| 2008 | Bernhard Katz Award, Biophysical Society (shared with Reinhard Jahn) |
| 2008 | Passano Foundation Award |
| 2010-2020 | 2 nd Merit Award, NIMH |
| 2010 | Kavli Prize in Neuroscience (shared with James Rothman and Richard Scheller) |
| 2010 | Albert Einstein Honorary Professorship, Chinese Academy of Sciences, Beijing |
| 2013 | Lasker-DeBakey Medical Basic Research Award (shared with Richard Scheller) |
| 2013 | Nobel Prize in Physiology or Medicine (shared with James Rothman and Randy Schekman) |
| 2014 | CINP Pioneer Award (shared with Solomon Snyder and Julien Mendlewicz) |
| 2014 | La Grande Médaille de la Ville de Paris (Échelon Vermeil; shared with James Rothman and Randy Schekman) |
| 2015 | Honorary Doctorate of Philosophy, Kaohsiung Medical University, Taiwan |
| 2016 | Grosses Bundesverdienstkreuz mit Stern der Bundesrepublik Deutschland |
| 2018 | Pericles Prize, Pericles International Academy, Rome Italy |
| 2020 | Doppler Lecture Award and Honorary Doctorate of Philosophy, University of Miskolc, Hungary |
| 2020 | Sherrington Lecture Award, University of Oxford, UK |

Learned Societies:

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| 2002 | Elected to the National Academy of Sciences of the U.S.A. |
| 2007 | Elected to the National Academy of Medicine |
| 2010 | Elected to the American Academy of Arts & Sciences |
| 2014 | Elected Foreign Member of the Norwegian Academy of Sciences |
| 2015 | Elected to the Deutsche Akademie der Naturforscher Leopoldina |
| 2017 | Elected Foreign Member of the Royal Society of London |
| 2018 | Elected Member of the European Science Academy |

Named Lectures and Keynote Addresses (selected):

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| 1996 | 7 th Nachshen Lecture, University of Maryland |
| 1999 | Berta V. Scharer Lecture, Albert Einstein University |
| 2000 | Presidential Lecture, Society for Neuroscience Meeting (San Diego) |
| 2002 | 1 st Presidential Lecture, UTMB Galveston |
| 2007 | Rudin Lecturer, Columbia University |
| 09-25-2008 | Hermann Rahn Lecture, SUNY Buffalo |
| 10-18-2009 | Special Lecture, Society for Neuroscience Meeting (Chicago) |
| 04-22-2010 | Picower Lecture, MIT |
| 07-25-2010 | Keynote Lecture, Gordon Conference on 'Synaptic Transmission' |
| 09-15-2010 | Agranoff Lecture, U. of Michigan |
| 04-05-2011 | Methusalem Lecture, U. of Leuven/Belgium |
| 04-27-2011 | Bishop Lecture, Washington University |
| 09-03-2011 | Keynote Lecture, α -Synuclein Satellite Meeting on Naxos, Greece |
| 09-20-2011 | 37 th Annual Andrew Mark Lippard Memorial Lecture, Columbia University |
| 10-27-2011 | Elite Lecture, Chinese Academy of Sciences, Shanghai |
| 08-05-2012 | Keynote Lecture, Gordon Conference on 'Neurobiology of Brain Disorders' |
| 09-25-2012 | Swamerdam Lecture, University of Amsterdam |
| 11-27-2012 | Zach Hall Lecture, University of Southern California |
| 12-13-2012 | Bass Lecture, Vanderbilt University |
| 03-26-2013 | Dorris Lecturer, Scripps Research Institute |
| 06-09-2013 | Keynote Lecture, Gordon Conference on 'Excitatory Synapses and Brain Function' |
| 08-05-2013 | Keynote Lecture, Conte Center of Harvard University Retreat |
| 10-24-2013 | Charlton Lecture, Tufts University, Boston |
| 03-04-2014 | Lasker Lecture, University of Southern California |

03-28-2014 Keynote Lecture, Synaptic Microcircuits Conference Bonn
 04-13-2014 Chancellor's Lecture, Louisiana State University, New Orleans
 05-20-2014 George Palade Lecture, UC San Diego
 06-25-2014 Keynote Lecture, Gordon Conference on 'Cell Biology of the Neuron'
 07-02-2014 Keynote Lecture, Gordon Conference on 'Molecular and Cellular Neurobiology'
 07-29-2014 Keynote Lecture, Gordon Conference on 'Neurobiology of Brain Disorders'
 08-15-2014 Keynote Lecture, Cracking-the-Neural Code Conference, Stanford University
 02-10-2015 Keynote Lecture, Photonics Conference, San Francisco
 03-03-2015 Richard Havel Lecture, The 2015 Deuel Conference
 05-12-2015 Keynote Lecture, Conference "From Neural Circuitry to Neurotechnology", Tokyo
 06-09-2015 Gregor Mendel Lecture, ESHG Conference Glasgow
 06-12-2015 Rita Levi-Montalcini Lecture, European Brain Institute, Rome
 06-13-2015 Keynote Lecture, ENI Neuroscience Meeting Goettingen
 06-15-2015 Keynote Lecture, EMBO Neurodegeneration Meeting, Heidelberg
 07-30-2015 Keynote Lecture, Japanese Neuroscience Meeting, Kobe
 09-01-2015 Keynote Lecture, Dublin Neuroscience Meeting, Ireland
 09-21-2015 CNS Leica Lecture, Wuzhen, China
 10-18-2015 Presidential Lecturer, Society for Neuroscience Meeting, Chicago
 12-16-2015 IBIS Distinguished Investigator Lecture, Seville, Spain
 01-26-2016 Blaffer Lecture, M.D. Anderson Cancer Center, Houston
 01-27-2016 Tushar K. Chowdury Memorial Lecture, U. of Oklahoma, Oklahoma City
 02-22-2016 Honors Lecture, New York University
 02-23-2016 Pritchett Lecture, U. of Pennsylvania, Philadelphia
 04-08-2016 Keynote Lecture, Calcium Signaling Meeting, Honolulu
 04-14-2016 Gould Lecture, Rutgers University
 06-13-2016 Keynote Lecture, Gordon Conference on 'Molecular and Cellular Neurobiology'
 08-07-2016 Keynote Lecture, Gordon Conference on 'Neurobiology of Brain Disorders'
 09-09-2016 Munck-Pfefferkorn Prize Lecture, Geisel School of Medicine, Dartmouth University
 10-18-2016 Robert Beamish Leadership Award, Institute of Cardiovascular Sciences, U. of Manitoba
 10-20-2016 Hans Neurath Lecture, University of Washington
 02-08-2017 David Smith Lecture, University of Oxford, UK
 02-09-2017 César Milstein Lecture, MRC Laboratory of Molecular Biology, UK
 02-13-2017 Keynote Address, Sunposium, Max-Planck-Institute Florida, Fort Lauderdale
 03-01-2017 Waelsch Lecture Award, Columbia University, New York City
 03-12-2017 Keynote Lecture, GRC on IGF and Insulin in Physiology and Disease, Ventura CA
 03-14-2017 Cobb Lecture, U. of British Columbia, Canada
 03-28-2017 Keynote Lecture, 19th Sölden Neuroscience meeting
 03-30-2017 Plenary Lecture, ADPD Conference Vienna
 04-05-2017 Chi-Bin Chien Memorial Lecture, University of Utah at Salt Lake City
 04-21-2017 Commencement Address, Stevenson School
 09-21-2017 Plenary Lecture, FENS Meeting Pecs
 12-19-2017 Plenary Lecture, Autism Conference of Peking University, Beijing
 01-31-2018 WALIS Lecture, National Institutes of Health, Washington DC
 04-10-2018 Plenary Lecture, Brain Initiative Conference, Washington DC
 04-18-2018 Rubenstein Lecture, Stanford University School of Medicine
 06-24-2018 Keynote Lecture, Gordon Conference on 'Cell Biology of the Neuron'
 07-29-2018 Keynote Lecture, Guangzhou SCI/Neuroregeneration Conference
 10-02-2018 Gail Gasser Lecture, U. of Pennsylvania Perelman School of Medicine
 10-03-2018 Lefler Lecture, Harvard Medical School
 10-04-2018 Keynote Lecture, Symposium on Epigenetic Control and Cellular Plasticity, UC Irvine
 10-12-2018 Maurice Albin Keynote Lecture, 46th Annual SNACC Meeting, San Francisco
 12-17-2018 Staudinger Lecture, University of Freiburg, Germany
 03-25-2019 Plenary Lecture, Inaugural Neuroscience Symposium, Capital Medical Univ. Beijing, China
 03-29-2019 Plenary Lecture, AD/PD Conference Lisbon, Portugal
 04-23-2019 Plenary Lecture, Synaptic Transmission Symposium, NUM Mexico City, Mexico
 06-05-2019 Inaugural Konrad Akert Memorial Lecture, University of Zürich, Switzerland
 07-21-2019 Keynote Lecture, GRC on Endocannabinoids, Barcelona, Spain

09-17-2019 Keynote Lecture, Synapse Conference, Göttingen, Germany
 09-23-2019 Keynote Lecture, Guangzhou Neuroscience Meeting, China
 10-03-2019 Flexner Discovery Lecture, Vanderbilt University
 11-08-2019 Keynote Lecture, 7th Chinese Nucleic Acid Forum, Guangzhou, China
 05-15-2020 Connell Lecture, U. of Michigan (canceled due to Covid-19 lockdown)
 06-20-2020 Keynote Lecture, Keystone Neurodegeneration meeting (canceled due to Covid-19 lockdown)
 10-02-2020 Eileen S. Trafimov Keynote Lecture, U. of Chicago Translational Neuroscience Symposium
 12-05-2020 Keynote Lecture, Brain and Mind Centre Sydney Symposium (virtual)
 03-04-2021 Dean's Lecture, Georgetown University (virtual)
 05-06-2021 Keynote Lecture, Public Health Summit, Vienna (virtual)
 06-28-2021 Keynote Lecture, WFSBP Meeting, Vienna (virtual)
 07-25-2021 Keynote Lecture, European Societies for Biophysics Meeting, Vienna
 08-28-2021 Alexander Petrenko Memorial Lecture, Moscow (virtual)

Professional Service/University Advisory Boards (selected):

1994 Member of the NIMH Evaluation Panel on Neuroscience
 1995-present Editorial Board, *Neuron*
 1995-2006 Editorial Board, *Journal of Biological Chemistry*
 1995 Co-Organizer (with R. Malenka), Neuropharmacology Symposium on "Presynaptic Mechanisms of Neurotransmission", San Diego CA
 1995-1998 Member, Cellular and Developmental Neurobiology Study Section, NIMH Program
 1998-2003 Member, Molecular and Cellular Developmental Neuroscience 1 Study Section
 1996 Co-Chair (with R. H. Scheller), Gordon Conference on the Cell Biology of the Neuron, June 16-21, 1996 in Plymouth, NH
 1996-2003 Associate Member, Neurosciences Research Program, San Diego, CA
 1997-2001 Receiving Editor, *European Journal of Neuroscience*
 1999 Organizer (with R. H. Scheller), Keystone Symposium "*Molecular Physiology and Pathology of Membrane Traffic*", Santa Fe, NM
 1999 Co-Organizer (with W.M. Cowan and C.F. Stevens), HHMI Workshop on "Synapses"
 2000-present Editorial Board, *Neuroscience*
 2000-2001 Co-Editor, *European Journal of Cell Biology*
 2000-present Editorial Board, *Journal of Molecular Neuroscience*
 2001-present Editorial Board, *European Journal of Neuroscience*
 2004-2009 Editorial Board, *Journal of Neuroscience*
 2005 Co-Organizer (with R. Fernández-Chacón and A.S Konnerth), UNIA Workshop Current Trends in Biomedicine "Imaging synapses: from individual molecules to brain circuits", Baeza, Spain
 2006-2016 Editorial Board, *Proc. Natl. Acad. Sciences U.S.A.*
 2007-2011 Co-Organizer (with H. Cline and R. Huganir), CSHL meeting "Synapses: From Molecules to Circuits & Behavior"
 2008 Chair, Neurobiology of Disease Gordon Conference, Oxford UK
 2008-2013 Member, Cellular and Molecular Biology of Neurodegeneration Study Section (CMND)
 2010-2014 Gallo Clinic and Research Center, UCSF, San Francisco, CA
 2012-present Picower Center at MIT, Cambridge, MA
 2013 Co-Organizer (with D.J. Surmeier), Neuropharmacology Symposium on "Synaptic Basis of Neurodegenerative Disorders", San Diego CA
 2013-2017 Chinese Academy Institute of Biophysics, Beijing, China
 2013-2017 Stanford Neuroscience Graduate Program Committee
 2013-present Shemyakin-Ovchinnikov Institute for Bioorganic Chemistry, Moscow, Russia
 2014-present Scientific Advisory Board, Berlin Institutes of Health, Berlin, Germany
 2014-2020 Chair of the Scientific Advisory Board, Science Matters
 2014-2015 Peking University, Beijing, China
 2014-2017 Scientific Advisory Board, Singapore National Research Foundation
 2014-2018 IMCB Scientific Advisory Board, A*Star, Singapore
 2016-present Chair, Scientific Advisory Board, *Matters*
 2017-2019 Scientific Advisory Board, Beihang University, Beijing, China
 2017 Co-Organizer, "From Molecules to Circuits Workshop", Baeza, Spain

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| 2017-present | Editorial Board, PLOS Biology |
| 2018-present | Scientific Advisory Board, Capital Medical University, Beijing, China |
| 2018-present | Scientific Advisory Board, Chinese Academy of Sciences Institute, Guangzhou, China |
| 2018-present | Scientific Advisory Board, Chinese Brain Initiative (North) |
| 2019-present | Scientific Advisory Board, Dept. of Neuroscience, Institut Pasteur, Paris |
| 2020 | Chair, Muscle & Axon Health Workshop organized by the SMA Foundation, New Orleans |
| 2020 | Ad hoc member, MDCN Study Section, NIH |
| 2021-present | Scientific Advisory Board, International Neuroscience Centre "Cajal" (CINC), Spain |
| 2021 | Ad hoc member, MDCN Study Section, NIH |

Scientific Advisory Boards and Consultancies of Companies:

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| 2002-present | Co-Founder and Scientific Advisory Board, REATA Pharmaceuticals, Inc., Dallas, TX |
| 2008-2010 | Pfizer Neuroscience Review Board, |
| 2011-2019 | Co-Founder and Scientific Advisory Board, Circuit Therapeutics Inc., Menlo Park, CA |
| 2013-2016 | Genentech Neuroscience Review Board, South San Francisco, CA |
| 2014-2017 | Co-Founder and Scientific Advisory Board, Bluenobel Inc., Wuxi, China |
| 2014-present | Scientific Advisory Board, Elysium Inc. |
| 2016-present | Scientific Advisory Board, Simcere Therapeutics |
| 2016-present | Nonexecutive Member, Board of Directors, Sanofi Inc., and Chair of the Scientific Committee |
| 2016-2018 | Co-Founder and Scientific Advisory Board, NeuCyte Inc. |
| 2017-2020 | Scientific Advisory Board, CytoDel Inc. |
| 2017-2018 | Scientific Advisory Board, Abide Therapeutics |
| 2017-2020 | Scientific Advisory Board, Everest Medical |
| 2017-present | Scientific Advisory Board, Jupiter Therapeutics |
| 2018-2019 | Board of Directors, Abide Therapeutics |
| 2018-present | Scientific Advisory Board, Alector LLC, and co-chair (with Richard Scheller) of the Strategy Portfolio and Review Committee (since 2020) |
| 2019-present | Scientific Advisory Board and Venture Partner, Camden/Catalia Partners |
| 2020-present | Board of Directors, CytoDel Inc. |
| 2020-present | Co-Founder and Scientific Advisory Board, Boost Neurosciences Inc. |
| 2020-present | Co-Founder and Scientific Advisory Board, Recognify Inc. |
| 2021-present | Scientific Advisory Board, BridgeBio Inc. |

Recent University Service and Teaching Activities:

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| 2014-present | Annual Core Course Module “Molecular Neuroscience” (course director) |
| 2017-2018 | Chair, Search Committee of the Stanford Neuroscience Institute for a junior faculty member in molecular/cellular neuroscience |
| 2017-present | Annual Course on Responsible Conduct of Research (contributor) |
| 2018-2019 | Chair, Search Committee of the Center for Molecular Neuroscience/Dept. of Molecular and Cellular Physiology and Dept. of Neurobiology at Stanford for two junior faculty positions in molecular/cellular neuroscience |

Thesis committees at Stanford (asterisks indicate lab members):

Bing Wu (Biology, L. Luo lab; graduated 2017); Abdul Rasheed Alabi (MD.PhD., R. Tsien lab; graduated 2017); Casey Guenther (Neuroscience; L. Luo lab; graduated 2016); Nic Berns (Neuroscience; L. Luo lab; graduated 2017); Kateryna Kozyrystka* (Neuroscience; graduated with an M.S. 2016); W. Dylan Hale* (MCP, graduated 2018); Erica Seigneur* (Neuroscience, graduated 2018); Andrew Shuster (Neuroscience, L. Luo lab; graduated 2020); Mazen Asaad (MCP; J.H. Lee lab); Rebecca Shi (Neuroscience; K. Shen lab); Beatriz Robinson (Neuroscience; J. Kaltschmidt lab); Geoffrey Stanley (Biophysics; S. Quake lab); Anna Khalaj* (Neuroscience); Roger Zhang* (MCP; graduated 2020); Samantha Golf* (Neuroscience); Sofia Essayan-Perez* (MD-PhD); Cosmos Wang* (Neuroscience); Konstantin Kaganovsky* (Neuroscience; jointly with Jun Ding); Steven Wilson* (MCP, shared with Axel Brunger; graduated 2020); Chuanyun Xu (Biology, L. Luo lab); Xue Yang (Cancer Biology; Khavali lab); Yuxi Ke (Bioengineering, M. Schnitzer lab); Brian Zhong (Bionengineering, A. Dunn lab).

Patents:

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| 1990 | <i>Sterol Regulatory Elements</i> , issued to M.S. Brown, J. L. Goldstein, D.W. Russell, and T.C. Südhof (Patent Number 4,935,363) |
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- 2003 *Methods for identifying agents that affect cleavage of amyloid- β precursor protein*, issued to X. Cao and T.C. Südhof (Patent Number 6,649,346)
- 2006 *Methods for modulating transcriptional activation using MINT proteins*, issued to T. Biederer, A. Ho, X. Liu, and T.C. Südhof (Patent Number 7,081,337)
- 2008 *Cysteine string protein and its role in neurodegenerative diseases*. T. Südhof, B. Stahl, and S. Tobaben (Patent Number 7,445,904 B2)
- 2015/17 *Direct Conversion of Cells to Cells of Other Lineages*, issued to M. Wernig, T. Vierbuchen, Z. Pang, and T.C. Südhof (Patent Number 9,057,053 and 9,822,338)

ARTICLES IN PEER-REVIEWED JOURNALS

1. Südhof, T.C. (1982) *Core structure, internal osmotic pressure and irreversible structural changes of chromaffin granules during osmometer behavior*. Biochim. Biophys. Acta **689**, 27-39.
2. Morris, S.J., Südhof, T.C., and Haynes, D.H. (1982) *Lipid and Protein interactions in Ca^{2+} - promoted aggregation and fusion of chromaffin granule membranes*. Biophys. J. **37**, 117-118.
3. Südhof, T.C., Walker, J.H., and Obrocki, J. (1983) *Catelectrin self-aggregates and promotes membrane aggregation in the presence of Ca^{2+}* . EMBO J. **1**, 1167-1170.
4. Morris, S.J., Südhof, T.C., and Haynes, D.H. (1983) *Ca^{2+} -promoted resonance energy transfer between fluo-rescently labeled proteins during aggregation of chromaffin granule membranes*. Biochim. Biophys. Acta **693**, 425-436.
5. Morris, S.J., Costello, M.J., Robertson, J.D., Südhof, T.C., Odenwald, W.F., and Haynes, D.H. (1983) *Chromaffin granules as a model for membrane fusion: implications for exocytosis*. J. Autonom. Nerv. Syst. **7**, 19-33.
6. Südhof, T.C., Zimmermann, C.W., and Walker, J.H. (1983) *Catelectrin in human blood cells*. Eur. J. Cell Biol. **30**, 214-218.
7. Südhof, T.C., and Morris, S.J. (1983) *Characteristics and determinants of osmotic lysis in chromaffin granules*. Biochim. Biophys. Acta **730**, 207-216.
8. Südhof, T.C., and Morris, S.J. (1983) *Temperature-induced lysis of chromaffin granules provides evidence against the two-pool hypothesis of catecholamine storage*. Biochim. Biophys. Acta **757**, 176-181.
9. Walker, J.H., Obrocki, J., and Südhof, T.C. (1983) *Catelectrin, a "calcium dependent membrane binding protein" associated with secretory granules in Torpedo cholinergic motor nerve endings and rat adrenal medulla*. J. Neurochem. **41**, 139-145.
10. Südhof, T.C. (1983) *Evidence for a divalent cation dependent catecholamine storage complex in chromaffin granules*. Biochem. Biophys. Res. Comm. **116**, 663-668.
11. Südhof, T.C., Ebbecke, G., Walker, J.H., Fritsche, U., and Boustead, C. (1984) *Isolation of mammalian catelectrins: A new family of ubiquitous Ca^{2+} regulated proteins*. Biochemistry **23**, 1103-1109.
12. Südhof, T.C. (1984) *Catelectrins are a ubiquitous family of Ca^{2+} -binding proteins purified by Ca^{2+} -dependent hydrophobic affinity chromatography by a mechanism distinct from that of calmodulin*. Biochem. Biophys. Res. Comm. **123**, 100-107.
13. Geisow, M., Childs, J., Dash, B., Harris, A., Panayotous, G., Südhof, T.C., and Walker, J.H. (1984) *Cellular distribution of three mammalian Ca^{2+} -binding proteins related to Torpedo catelectrin*. EMBO J. **3**, 2969-2974.
14. Südhof, T.C., Walker, J.H., and Fritsche, U. (1985) *Characterization of Torpedo catelectrins, a new Ca^{2+} -binding protein*. J. Neurochem. **44**, 1302-1307.
15. Lehrman, M.A., Schneider, W.J., Südhof, T.C., Brown, M.S., Goldstein, J. L., and Russell, D.W. (1985) *LDL receptor mutation: Alu-alu recombination deletes exons encoding transmembrane and cytoplasmic domains*. Science **227**, 140-146.

16. Südhof, T.C., Goldstein, J.L., Brown, M.S., and Russell, D.W. (1985) *The LDL receptor gene: A mosaic of exons shared with different proteins.* Science **228**, 815-822.
17. Südhof, T.C., Russell, D.W., Brown, M.S., Goldstein, J.L., Sanchez-Pescador, R., and Bell, G.T. (1985) *Cassette of eight exons shared by genes for LDL receptor and EGF precursor.* Science **228**, 893-895.
18. Silva, F.G., Sherrill, K., Spurgeon, S., Südhof, T.C., and Stone, D.K. (1986) *High-level expression of the 32.5-kilodalton calelectrin in ductal epithelia as revealed by immunocytochemistry.* Differentiation **33**, 175-183.
19. Ma, P.T.S., Gil, G., Südhof, T.C., Bilheimer, D.W., Goldstein, J.L., and Brown, M.S. (1986) *Mevinolin, an inhibitor of cholesterol synthesis, induces mRNA for low density lipoprotein receptor in livers of hamsters and rabbits.* Proc. Natl. Acad. Sci. U.S.A. **83**, 8370-8374.
20. Südhof, T.C., Russell, D.W., Brown, M.S., and Goldstein, J.L. (1987) *42-bp element from LDL receptor gene confers end-product repression by sterols when inserted into viral TK promoter.* Cell **48**, 1061-1069.
21. Davis, C.G., Goldstein, J.L., Südhof, T.C., Anderson, R.G.W., Russell, D.W., and Brown, M.S. (1987) *Acid-dependent ligand dissociation and recycling of LDL receptor mediated by growth factor homology region.* Nature **326**, 760-764.
22. Südhof, T.C., Van Der Westhuyzen, D.R., Goldstein, J.L., Brown, M.S., Russell, D.W. (1987) *Three direct repeats and a TATA-like sequence are required for regulated expression of the human LDL receptor gene.* J. Biol. Chem. **262**, 10773-10779.
23. Südhof, T.C., Lottspeich, F., Greengard, P., Mehl, E., and Jahn, R. (1987) *Synaptophysin: A synaptic vesicle protein with four transmembrane regions and a novel cytoplasmic domain.* Science **238**, 1142-1144.
24. Südhof, T.C., Lottspeich, F., Greengard, P., Mehl, E., and Jahn, R. (1987) *The cDNA and derived amino acid sequences for rat and human synaptophysin.* Nucleic Acids Res. **15**, 9607-9625.
25. van Driel, I.R., Goldstein, J.L., Südhof, T.C., and Brown, M.S. (1987) *First cysteine-rich repeat in ligand-binding domain of low density lipoprotein receptor binds Ca²⁺ and monoclonal antibodies, but not lipoproteins.* J. Biol. Chem. **262**, 17443-17449.
26. Dawson, P.A., Hofmann, S.L., Van Der Westhuyzen, D.R., Südhof, T.C., Brown, M.S., and Goldstein, J.L. (1988) *Sterol-dependent repression of low density lipoprotein receptor promoter mediated by 16-base pair sequence adjacent to binding site for transcription factor SP1.* J. Biol. Chem. **263**, 3372-3379.
27. Südhof, T.C., Slaughter, C.A., Leznicki, I., Barjon, P., and Reynolds, G.A. (1988) *Human 67-kDa calelectrin contains a duplication of four repeats found in 35-kDa lipocortins.* Proc. Natl. Acad. Sci. U.S.A. **85**, 664-668.
28. Hom, Y.K., Südhof, T. C., Lozano, J.J., Haindl, A.H., and Rocha, V. (1988) *Mammary gland Ca²⁺-binding proteins: Identification as calelectrins and calpactin I/p36.* J. Cell Physiol. **135**, 435-442.
29. Perin, M.S., Fried, V.A., Slaughter, C.A., and Südhof, T.C. (1988) *The structure of cytochrome b561, a secretory vesicle-specific electron transport protein.* EMBO J. **7**, 2697-2703.
30. Johnston, P.A., Jahn, R., and Südhof, T.C. (1989) *Transmembrane topography and evolutionary conservation of synaptophysin.* J. Biol. Chem. **264**, 1268-1273.
31. Südhof, T.C., Baumert, M., Perin, M.S., and Jahn, R. (1989) *A synaptic vesicle membrane protein is conserved from mammals to Drosophila.* Neuron **2**, 1475-1481.
32. Südhof, T.C., Czernik, A.J., Kao, H., Takei, K., Johnston, P.A., Horiuchi, A., Wagner, M., Kanazir, S.D., Perin, M.S., DeCamilli, P., and Greengard, P. (1989) *Synapsins: mosaics of shared and individual domains in a family of synaptic vesicle phosphoproteins.* Science **245**, 1474-1480.

33. Johnston, P.A., Cameron, P.L., Stukenbrok, H., Jahn, R., De Camilli, P., and Südhof, T.C. (1989) *Synaptophysin is targeted to similar microvesicles in CHO- and PC12-cells.* EMBO J. **8**, 2863-2872.
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