

Curriculum Vitae
Pietro De Camilli, M.D.

March 2016

Work Address:

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Place of Birth:

Cittiglio, Lombardy, Italy

Citizenship:

Dual Citizenship: Italy and USA

Marital Status:

Married (Claudia Buzzi), three children

Education:

- 1961-1966 *Maturita' Classica*. Lyceum Manzoni, Milano, Italy
1966-1972 M.D. "Summa cum Laude" University of Milano (Italy)
1973-1975 Postgraduate Degree (*specialita'*) in Medical Endocrinology,
 University of Pavia (Italy)

Mandatory Military Service (Italy):

- 1974-75 Medical Lieutenant in the Italian Air Force

Employment:

- 1972-1978 Assistant Professor, Department of Medical Pharmacology and CNR
Center of Cytopharmacology, University of Milano, Italy
1978-1979 Postdoctoral Fellow, Department of Pharmacology (laboratory of Paul Greengard), Yale University School of Medicine
1979-1981 Assistant Professor, Section of Cell Biology (Chairman George Palade), Yale University School of Medicine
1981-1987 Associate Professor, Department of Medical Pharmacology and CNR
Center of Cytopharmacology, University of Milano, Italy
1987-1988 Visiting Associate Professor, Laboratory of Paul Greengard, The
Rockefeller University, New York
1988-1991 Associate Professor with Tenure, Department of Cell Biology and
Section of Molecular Neurobiology, Yale University School of
Medicine
1992- Professor, Department of Cell Biology
1992- Investigator, Howard Hughes Medical Institute, Yale University
School of Medicine
1997-2000 Chairman, Department of Cell Biology, Yale University School of
Medicine
2004- Member, Kavli Institute for Neuroscience at Yale University
2005- Founding Director, Yale Program for Cellular Neuroscience,
Neurodegeneration and Repair (CNNR)

2005-2015	Professor (secondary appointment), Department of Neurobiology, Yale University School of Medicine
2015-	Chairman, Department of Neuroscience, Yale University School of Medicine
2015-	Director, Kavli Institute for Neuroscience at Yale University

Teaching & Selected Committees at Yale University:

1988-1989	Member, Yale Neuroscience Steering Committee
1992-1995	Director of Medical Studies, Department of Cell Biology
1995-1997	Member, Advisory Committee of the Division of Biological Sciences
1998-1999	Search Committee for the Chair of the Department of Molecular and Cellular Physiology
2000-2001	Search Committee for the Chair of the Department of Pediatrics
2002-2003	Search Committee for the Director of the Yale Cancer Center
2002-2005	Senior Faculty Slots Allotment Committee
2003-2004	Search Committee for the Dean of the Medical School
2003-2004	Committee on Cooperative Research
2004-2005	Basic Science Planning Committee, Medical School
2006-2007	Search Committee for the Chair of the Department of Cell Biology
2007-2009	Search Committee for the Chair of the Department of Molecular and Cellular Physiology

Fellowships and Selected Special Grant Awards:

1978-1981	Fulbright-Hays Visiting Scholar in Pharmacology (Yale University)
1978	NATO fellowship (declined)
1978-1979	Fellowship from the Muscular Dystrophy Association of America
1989	Klingenstein Neuroscience Award
1991	McKnight Research Project Award
2005-2008	Grant from the G. Harold and Leila Y. Mathers Charitable Foundation

Selected Lectureships:

1984	Plenary Lecture, First meeting of the Italian Society of Neuroscience (Rome, Italy)
1986	Plenary Lecture, European Society of Cell Biology (Budapest, Hungary)
1992	Plenary Lecture, European Society of Neuroscience (Münich, Germany)
1994	Plenary Lecture, Annual Meeting of the Endocrine Society (Anaheim, California)
1995	Special Lecturer, Annual Meeting of the Society for Neuroscience (San Diego, California)
1997	"Kroc" Lecture, Diabetes and Endocrinology Research Center (DERC), University of Washington (Seattle, Washington)
2000	Bruno Ceccarelli Neuroscience Lecture (Milano, Italy)
2002	UCLA School of Medicine Medical Scientist Training Program (MSTP): Distinguished Lecturer.
2002	Eighth Annual Kenneth F. Naidorf Memorial Lecture, Columbia University (New York, New York)
2002	Alex Novikoff Lecture, 2002 Lysosome Gordon Conference (Andover, New Hampshire)
2003	Neil C. Moran Lecture, Emory University School of Medicine (Atlanta, Georgia)
2003	K.A.C. Elliott Lecture in Neurochemistry, McGill University (Montreal, Quebec, Canada)

2004	Emilio Trabucchi Lecture, University of Milano (Milano, Italy)
2004	Keynote lecture, Cell Biology of the Neuron Gordon Conference
2004	Harvey Lecture Series, The Harvey Society (New York, New York)
2006	Aravind K. Babu Lecture in Membrane Biology, Vanderbilt University (Nashville, Tennessee)
2006	Crill Lecture, University of Washington (Seattle, Washington)
2006	Keynote Lecturer, Korean Society for Molecular and Cell Biology Meeting (Seoul, Korea)
2007	Keynote Lecturer, Glucose Transporter FASEB Summer Research Conference (Snowmass, Colorado)
2008	Distinguished Lecture Series, Program in Molecular Medicine University of Massachusetts (Worcester, Massachusetts)
2008	Nina Wurblough Lecture, The vMedical College of Cornell University (New York, New York)
2008	Karl Friedrich Bonhoeffer Lecture, Max-Planck Institute (Gottingen, Germany)
2008	Genewiz Keynote Lecture, Annual Pittsburgh Symposium on Intracellular Membrane Traffic, University of Pittsburgh School of Medicine (Pittsburgh, Pennsylvania)
2008	Inaugural Lecture of the Academic Year, University of Milano, School of Biotechnology (Milan, Italy)
2009	Keynote Lecturer, DIBIT-San Raffaele Hospital and University Retreat (Milan, Italy)
2009	Erlanger and Gasser Lecture, Washington University (St. Louis, MI)
2009	Keynote Lecture, EMBO "Membrane Dynamics in Endocytosis" Conference, (Chania, Crete, Greece)
2009	Albert Szent-Györgyi Lecturer, Mayo Clinic (Rochester, MN)
2009	Brody Memorial Lecture, University of Iowa (Iowa City, IA)
2010	1 st Sarah Winans Newman Lecture, University of Michigan (Ann Arbor, MI)
2010	Keynote Lecture, Cell Biology of the Neuron Gordon Conference (Waterville Valley, NH)
2011	Keynote Lecture, EMBO Workshop, Cell Biology of the Neuron (Crete, Greece)
2011	Keynote Lecture, Excitatory Amino Acids Gordon Conference (Easton, MA)
2011	John Cebra Lecture, Marine Biological Laboratory (Wood Hole, MA)
2012	Keynote Lecture, EuroMEMBRANE International Meeting "Membrane Dynamics in Physiology and Disease" (Basel, Switzerland)
2012	Keynote Lecture, Joint Meeting of the French Societies of Cell Biology and Developmental Biology (Montpellier, France)
2012	Fouad A. and Val Imm Bashour Distinguished Lectureship in Physiology, University of Texas Southwestern Medical Center (Dallas, TX)
2012	Keynote Lecture, "Inositide Signaling in Health and Disease", Coorg, India
2013	Keynote Lecture, ABCD (Italian Society of Cell Biology and Differentiation) meeting (Ravenna, Italy)
2014	Dennis Shields Lecture, 9 th EMBO/Annaberg Meeting: Protein and Lipid Function in Secretion and Endocytosis (Goldegg, Austria)
2014	C. Warren Olanow Lecture, Friedman Brain Institute, Mount Sinai Medical School (New York, NY)

- 2014 Hille Lecture, Department of Physiology, University of Washington (Seattle, WA)
- 2014 Herbert Lecture, Vollum Institute, (Portland, OR)
- 2014 Walter Massey Family Lecture (Woods Hole, MA)
- 2014 21st Severo Ochoa Memorial Lecture, Centro de Biología Molecular Severo Ochoa, University of Madrid (Madrid, Spain)
- 2015 Keynote Lecture, TOXINS 2015: Basic Science and Clinical Aspects of Botulinum and Other Neurotoxins (Lisbon, Portugal)
- 2015 Keynote Lecture, Membrane Dynamics and Protein Sorting meeting, Israeli Society for Cell Biology, (Weizmann Institute, Israel)
- 2015 Keynote Lecture, Molecular Membrane Biology Gordon Conference, (Andover, NH)
- 2015 EMBO Keynote Lecture, Signalling 2015: Cellular Functions of Phosphoinositides and Inositol Phosphates, Biochemical Society (Cambridge, UK)
- 2015 Keynote Lecture, Organelle Crosstalk in Membrane Dynamics and Cell Signalling, Biochemical Society (Edinburgh, UK)
- 2016 Keynote Lecture, Sphingonet International Colloquium (Amsterdam)

Honors:

- 1987 Elected EMBO Member (European Molecular Biology Organization)
- 1990 Max-Planck Research Prize (shared with Dr. R. Jahn, Münich)
- 1995 DATTA Lecturer and Medal Recipient, Federation of European Biochemical Societies (Basel, Switzerland)
- 1997 Keith Porter Lecture, American Society Cell Biology (Washington, DC)
- 2001 Elected, American Academy of Arts and Sciences
- 2001 Elected, National Academy of Sciences (5/2009-5/2012, Chair of Section 24)
- 2003 Eugene Higgins Professor of Cell Biology, Yale University
- 2005 Honorary Member, Italian Society for Neuroscience
- 2005 Elected, National Academy of Medicine (formerly the Institute of Medicine)
- 2009 NARSAD Distinguished Investigator Award
- 2010 Javitz Neuroscience Investigator Award
- 2012 Sir Bernard Katz Award by the Exocytosis and Endocytosis Subgroup of the Biophysical Society
- 2012 Fellow of the American Association for the Advancement of Science (AAAS)
- 2013 Honorary Doctorate, Okayama University (Okayama, Japan)
- 2013 Elected, Accademia Nazionale dei Lincei (Italian Academy of Sciences)
- 2015 John Klingenstein Professor of Neuroscience, Yale University
- 2015 Julius Axelrod Prize, Society for Neuroscience

Societies:

- American Society for Cell Biology
 2001-2004, Councilor
2015: President-elect (to serve in 2017)
- Society for Neuroscience
 Biophysical Society

Editorial Boards:

1991-1997	Journal of Neurocytology
1991-1997	Journal of Neuroscience
1991-present	European Journal of Cell Biology
1993-1995	Learning and Memory
1994-1995	Neuron
1994-1996	Diabetes
1994-2000	Italian Journal of Neurological Sciences
1994-2000	Molecular Medicine
1994-present	Current Opinion in Cell Biology
1996-1999	European Journal of Neuroscience (Receiving US Editor)
1998-2015	Journal of Cell Biology (monitoring editor)
1999-2000	Molecular Medicine
1999-2001	Molecular Cell
2000-2010	EMBO Reports
2000-present	EMBO Journal
2001-present	Developmental Cell
2002-present	Proceedings of the National Academy of Sciences (monitoring editor)
2005-2008	Brain Cell Biology
2009-present	Frontiers in Synaptic Neuroscience

Selected NIH Service:

1993	NIMH, Panel on Neuroimmunology and Mental Health
1996	NINDS, Division of Intramural Research, External Review Committee
1998	NICHD, Cell Biology and Metabolism Branch, External Review Committee
1999-2000	NINDS: "Channels, Synapses and Circuits planning group"
2001	NINDS, Division of Intramural Research, External Review Committee
2001-2005	NIH Study Section SYN, formerly MCDN1
2005-2006	NIH Study Section Chair, SYN, formerly MCDN1
2009	MCDN Challenge Grant Distinguished Editorial Panel

NAS Service:

2009-2012	Chair of Section 24 (Cellular and Molecular Neuroscience)
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Selected Advisory Boards:

1994-1997	Scientific Advisory Board, Max-Planck Institute for Medical Research, Heidelberg, (Germany)
1995-2005	Scientific Advisory Board, CuraGen Corporation
1997-2001	Scientific Review Committee Telethon, Italy (1999-2001, Vice-President)
1997-2004	Scientific Advisory Board, The Pew Scholars Program in Biological Sciences
2002-2011	Scientific Advisory Board, Max-Planck Institute for Molecular Cell Biology and Genetics, Dresden, (Germany)
2004-2008	Scientific Advisory Board, Latin American Fellows Program, The Pew Scholars Program in Biological Sciences
2004-2009	McKnight Endowment Fund For Neuroscience (Scholars Awards Committee)
2005-2011	Scientific Advisory Board, Telethon (Italy)
2006-2009	Italian Scholarship Advisory Committee, Armenise-Harvard Foundation, Rome (Italy)
2008-2009	Scientific External Advisory Board, New York Langone Medical Center and School of Medicine

2008-2016	Scientific Advisory Board, Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences (GGNB) Göttingen, Germany)
2012-2013	Dulbecco Telethon Institute, Italy, Chair of Review Committee
2013-	Scientific Advisory Board, The Jane Coffin Childs Memorial Fund for Medical Research
2013-	Fondazione Umberto Veronesi (Italy)
2013-	Italian Scholarship Advisory Committee, Armenise-Harvard Foundation, Rome (Italy)
2013-	Member EMBO Publications Advisory Board
2015-	Elected American Society for Cell Biology 2017 President

Organization of International Meetings:

1987	EMBO Symposium (co-Chairs: J.P. Changeux, M. Raff, H. Thoenen, J. Tooze)
1996	Keystone Meeting on Cell Polarity (co-Chair Keith Mostov)
1996	Yale Special Symposium "The Peripheral Cell Cytoskeleton" (co-Organizer Peter Novick)
2002	Gordon Conference "Cell Biology of the Neuron" (co-Chair Cornelia Bargmann)
2003	Treilles (France) Conference "Development and Function of the Synapse" (co-Chair Yuki Goda)
2008	Pavia (Italy) The 2008 Golgi Meeting (Alberto Luini, Daniela Corda and Jennifer Lippincott-Schwartz co-organizers)
2011	Keystone Symposium, Keystone, Colorado. "Inositides Signaling, Pharmacology and Disease" (Marco Falasca, Nullin Divecha and John York, co-organizers)
2013	Janelia Farm meeting "Synaptic Vesicle Biogenesis" (Timothy Ryan and Volker Haucke, co-organizers)
2015	(August) Les Treilles (France) Conference: "Membrane fission: Understanding the mechanism of action of dynamin"

Publications

1. De Camilli P, Peluchetti D, and Meldolesi J. 1974. Structural difference between luminal and lateral plasmalemma in pancreatic acinar cells. *Nature*. 248: 245-246.
2. De Camilli P, and Meldolesi J. 1974. Subcellular distribution of the PI effect in the pancreas of the guinea pig. *Life Sci.* 15: 711-721.
3. Meldolesi J, De Camilli P, and Peluchetti D. 1974. The membrane of secretory granules: structure, composition and turnover. In *Secretory Mechanism of Exocrine Glands*. Eds., N.A. Thorn & O.H. Petersen. (Munksgaard, Copenhagen), pp 138-151.
4. Galli P, Brenna A, De Camilli P, and Meldolesi J. 1976. Extracellular calcium and the organization of tight junctions in pancreatic acinar cells. *Exptl. Cell Res.* 99: 178-183.
5. De Camilli P, Peluchetti D, and Meldolesi J. 1976. Dynamic changes of the luminal plasmalemma in stimulated parotid acinar cells. *J. Cell Biol.* 70: 59-74.
6. Meldolesi J, Clementi F, De Camilli P, Brenna A, and Borgese, N. 1976. Regulation of protein secretion in the exocrine pancreas and in other secretory systems. Role of calcium and of cellular membranes. *Acta Medica Romana* 14: 461-469.
7. Meldolesi J, De Camilli P, and Brenna A. 1977. The topology of plasma membrane in pancreatic acinar cells. First International Symposium on Hormonal Receptors in Digestive Tract Physiology. INSERM Symposium No. 3. Eds., S. Bonfils, P. Fromageot & G. Rosselin. (Elsevier, North Holland), pp 203-212.
8. De Camilli P, Tagliabue L, Paracchi S, Beck Peccoz P, Faglia,G, and Giovannelli M. 1977. *In vitro* study of the relase of GH by fragments of GH-producing human pituitary adenomas. Effect of TRH and DBcAMP. In European Workshop on Treatment of Pituitary Adenomas. Eds., R. Fahlbush & K.V. Werder. (George Thieme Verlag, Stuttgart), pp 172-179.
9. Borgese N, De Camilli P, Brenna A, and Meldolesi J. 1977. Immunochemical and freeze-fracture study of membrane biogenesis and interactions. In *Membranous elements and movement of molecules. Methodological Surveys in Biochemistry*. Vol. VI. Ed., E. Reid. (Harwood, Chichester), pp 337-353.
10. Giovannelli M, Gaini SM, Tomei V, Motti EDF, Beck Peccoz P, Paracchi A, and De Camilli P. 1977. Transphenoidal microsurgery of hypersecreting pituitary adenomas. In European Workshop on Treatment of Pituitary Adenomas. Eds., R. Fahlbush & K.V. Werder. (George Thieme Verlag, Stuttgart), pp 272-279.
11. Meldolesi J, Borgese N, De Camilli P, and Ceccarelli B. 1978. Cytoplasmic membranes and the secretory process. In *Cell Surface Reviews*. Vol. V. Eds., G. Poste & C.N. Nicolson. (North Holland Publ. Co., Amsterdam), pp 509-627.
12. Zanini A, Giannattasio G, De Camilli P, Panerai AE, Müller EE, and Meldolesi J. 1979. *In vitro* growth hormone and prolactin biosynthesis and release in rat pituitary homografts. I. Biochemical and morphological characterization of the system. *Endocrinology*. 104: 226-236.
13. Meldolesi J, Castiglioni G, Parma R, Nassivera N, and De Camilli P. 1978. Ca^{2+} -dependent disassembly and reassembly of occluding junctions in guinea pig pancreatic acinar cells. Effect of drugs. *J. Cell Biol.* 79: 156-172.
14. De Camilli P, Macconi D, and Spada A. 1979. Dopamine inhibits adenylyate cyclase in human prolactin-secreting pituitary adenomas. *Nature*. 278: 252-254.
15. Tanaka Y, De Camilli P, and Meldolesi J. 1979. Membrane interactions between secretion granules and plasmalemma in three exocrine glands. *J. Cell Biol.* 84: 438-453.

16. De Camilli P, Ueda T, Bloom FE, Battenberg E, and Greengard P. 1979. Widespread distribution of Protein I throughout the central and peripheral nervous system. *Proc. Natl. Acad. Sci. USA.* 76: 5977-5981.
17. De Camilli P, Spada A, Beck Peccoz P, Moriondo P, Giovanelli M, and Faglia G. 1979. Presence of a dopamine-sensitive adenylate cyclase in functioning human pituitary adenomas. In *Pituitary Microadenomas*. Serono Symposia Series. Eds., G. Faglia & M. Giovanelli. (Academic Press, New York), pp 165-172.
18. De Camilli P, Zanini A, Giannattasio G, & Meldolesi J. 1979. Synthesis, intracellular transport, packaging and release of growth hormone and prolactin in normal and tumoral pituitary cells. In *Pituitary Microadenomas*. Serono Symposia Series. Eds., G. Faglia & M. Giovanelli. (Academic Press, New York).
19. Borgese N, De Camilli P, Tanaka Y, and Meldolesi J. 1979. Membrane interactions in secretory cell systems. In *Secretory Mechanisms*. Proceedings of the Meeting of the British Society for Cell Biology and Society for Experimental Biology. Eds., C. Duncan & C. Hopkins. pp 117-144.
20. Lohmann SM, Walter U, Miller PE, Greengard P, and De Camilli P. 1981. Immunohistochemical localization of cGMP-dependent protein kinase in mammalian brain. *Proc. Natl. Acad. Sci. USA.* 78: 653-657.
21. Walter U, De Camilli P, Lohmann SM, Miller PE, and Greengard P. 1981. Regulation and cellular localization of cAMP-dependent and cGMP-dependent protein kinases. In *Protein Phosphorylation*. Cold Spring Harbor Symposia on Cell Proliferation. Eds., O. Rosen & E. Krebs. (Cold Spring Harbor Press, New York), pp 141-157.
22. Greengard P, and De Camilli P. 1981. Protein phosphorylation in neurons. In *Disease of the Motor Unit*. Ed., D.L. Scotland. (Houghton Mifflin Professional Publishers, Boston), pp 441-460.
23. Fried G, Nestler EJ, De Camilli P, Stjärne L, Olson L, Lundberg JM, Hökfelt T, Ouimet CC, and Greengard P. 1982. Cellular and subcellular localization of Protein I in the peripheral nervous system. *Proc. Natl. Acad. Sci. USA.* 79: 5562-5566.
24. Miller PE, Walter U, Theurkauf WE, Vallee RB, and De Camilli P. 1982. Frozen tissue sections as an experimental system to reveal specific binding sites for the regulatory subunit of type II cAMP-dependent protein kinase (R_{II}) in neurons. *Proc. Natl. Acad. Sci. USA.* 79: 5562-5566.
25. Walter U, Walter-Lohmann SM, Reiser G, Schwoch G, Miller P, and De Camilli P. 1982. Studies on regulation and cellular localization of cAMP- and cGMP-dependent protein kinases. In *Cell Function and Differentiation*. Part C. (A.R. Liss Inc., New York), pp 173-182.
26. De Camilli P, Cameron R, and Greengard P. 1983. Synapsin I (Protein I), a nerve terminal-specific phosphoprotein: I. Its general distribution in synapses of the central and peripheral nervous system demonstrated by immunofluorescence in frozen and plastic sections. *J. Cell Biol.* 96: 1337-1354.
27. De Camilli P, Harris SM, Huttner WB, and Greengard P. 1983. Synapsin I (Protein I), a nerve terminal-specific phosphoprotein: II. Its specific association with synaptic vesicles demonstrated by immunocytochemistry in agarose-embedded synaptosomes. *J. Cell Biol.* 96: 1355-1373.
28. Huttner WB, Schiebler W, Greengard P, and De Camilli P. 1983. Synapsin I (Protein I), a nerve terminal-specific phosphoprotein: III. Its association with synaptic vesicles studied in a highly-purified synaptic vesicle preparation. *J. Cell Biol.* 96: 1374-1388.
29. De Camilli P. 1984. Immunocytochemistry as a tool in the study of protein phosphorylation in the nervous system. *Adv. Cyclic Nucleot. Prot. Phosphoryl. Res.* 17: 489-499.

30. De Camilli P, and Navone F. 1984. Immunocytochemistry as a tool in the study of neurotransmitter actions. *Trends Pharm. Sci.* 5: 300-303.
31. De Camilli P, Miller PE, Navone F, Theurkauf WE, and Vallee RB. 1984. Distribution of microtubule-associated protein 2 (MAP2) in the nervous system of the rat studied by immunofluorescence. *Neuroscience*. 11: 819-846.
32. De Camilli P, Miller PE, Levitt P, Walter U, and Greengard P. 1984. Anatomy of cerebellar Purkinje cells in the rat determined by a specific immunohistochemical marker. *Neuroscience* 11: 761-817.
33. Joyce N, De Camilli P, and Boyles J. 1984. Pericytes, like vascular smooth muscle cells, are immunocytochemically positive for cGMP-dependent protein kinase. *Microvascular Res.* 28: 206-219.
34. Lohmann SM, De Camilli P, Einig J, and Walter U. 1984. High affinity binding of the regulatory subunit (RII) of cAMP-dependent protein kinase to microtubule-associated and other cellular proteins. *Proc. Natl. Acad. Sci. USA*. 81: 6723-6727.
35. Levitt P, Rakic P, De Camilli P, and Greengard P. 1984. Emergence of cyclic GMP-dependent protein kinase immunoreactivity in developing Rhesus Monkey cerebellum: correlative immunocytochemical and electron microscopic analysis. *J. Neurosci.* 4: 2553-2564.
36. Navone F, Greengard P, and De Camilli P. 1984. Synapsin I in nerve terminals: selective association with small synaptic vesicles. *Science*. 226: 1209-1211.
37. Giannattasio G, Spada A, Nicosia S, and De Camilli P. 1984. Transduction of dopamine and vasoactive intestinal polypeptide signals in prolactin-secreting cells. In *Prolactin Secretion: A Multidisciplinary Approach*. Eds., F. Mena & R. Valverde. (Academic Press, New York), pp 187-207.
38. Rosa P, Hille A, Lee RWH, Zanini A, De Camilli P, and Huttner, W.B. 1985. Secretogranin I and II. Two tyrosine-sulfated secretory proteins common to a variety of cells secreting peptides by the regulated pathway. *J. Cell Biol.* 101: 1999-2011.
39. De Camilli P, and Greengard P. 1986. Synapsin I: a synaptic vesicle-associated neuronal phosphoprotein. *Biochem. Pharmacol.* 35:43-49.
40. De Camilli P, Moretti M, Denis Donini S, Walter U, and Lohmann S. 1986. Heterogeneous distribution of the cAMP receptor protein RII in the nervous system: evidence for its intracellular accumulation on microtubules, microtubule-organizing centers, and in the area of the Golgi complex. *J. Cell Biol.* 103: 189-203.
41. Joyce NC, De Camilli P, Lohmann S, and Walter U. 1986. cGMP-dependent protein kinase, a possible mediator of atrial natriuretic factor action, is present in high concentrations in contractile cells of the kidney vasculature. *J. Cycl. Nucleot. Res.* 11: 191-198.
42. Favre D, Scarfone E, Di Gioia G, De Camilli P, and Dememes D. 1986. Presence of Synapsin I in afferent and efferent endings of vestibular sensory epithelia. *Brain Research*. 384: 379-382.
43. Navone F, Jahn R, Di Gioia G, Stukenbrok H, Greengard P, and De Camilli P. 1986. Protein P38: an integral membrane protein specific for small clear vesicles of neurons and neuroendocrine cells. *J. Cell Biol.* 103: 2511-2527.
44. Lohmann SM, De Camilli P, and Walter U. 1987. Type II cAMP-dependent protein kinase regulatory subunit-binding proteins. *Meth. Enzymol.* 159: 183-193.
45. De Camilli P, and Navone F. 1987. Regulated secretory pathways of neurons and their relation to the regulated secretory pathways of endocrine cells. In *Cellular and Molecular Biology of Hormone and Neurotransmitter containing secretory vesicles*. *Ann. N.Y. Acad. Sci.* 493: 461-479.
46. Valtorta F, Villa A, Jahn R, De Camilli P, Greengard P, and Ceccarelli B. 1988. Localization of synapsin I at the frog neuromuscular junction. *Neuroscience*. 24: 593-603.

47. De Camilli P, Vitadello M, Canevini MP, Zanoni R, Jahn R, and Gorio A. 1988. The synaptic vesicle proteins synapsin I and p38 (synaptophysin) are concentrated both in efferent and afferent nerve endings of the skeletal muscle. *J. Neurosci.* 8: 1625-1631.
48. Solimena M, Folli F, Denis Donini S, Comi GC, Pozza G, De Camilli P, and Vicari M. 1988. Auto-antibodies directed against glutamic acid decarboxylase (GAD) in the cerebrospinal fluid and serum of a patient with stiff-man syndrome, epilepsy and type 1 diabetes mellitus. *New Engl. J. Med.* 318: 1012-1020.
49. Matteoli M, Haimann C, Torri-Tarelli F, Polak JM, Ceccarelli B, and De Camilli P. 1988. Differential effect of alpha-latrotoxin on exocytosis of acetylcholine-containing small synaptic vesicles and of CGRP-containing large dense-core vesicles at the frog neuromuscular junction. *Proc. Natl. Acad. Sci. USA.* 85: 7366-7370.
50. Scarfone E, Demêmes D, Jahn R, De Camilli P, and Sans A. 1988. Secretory function of the vestibular nerve calix suggested by presence of vesicles, synapsin I and synaptophysin. *J. Neurosci.* 8: 4640-4645.
51. Walaas SI, Lai Y, Gorelick FS, De Camilli P, Moretti M, and Greengard P. 1988. Cell-specific localization of the α -subunit of calcium/calmodulin-dependent protein kinase II in Purkinje cells in rodent cerebellum. *Mol. Brain Res.* 4: 233-242.
52. Solimena M, Folli F, Morello F, Bottazzo GF, Toso V, and De Camilli P. 1989. A second case of Stiff-Man syndrome and epilepsy with autoantibodies against the GABA-ergic system. In *Motor Disturbances II*. Eds., A. Berardelli, R. Benecke, M. Manfredi & C.D. Marsden. (Academic Press, New York).
53. Cozzi MG, Rosa P, Greco A, Hille A, Huttner WB, Zanini A, and De Camilli P. 1989. Immunohistochemical localization of secretogranin II in the rat cerebellum. *Neuroscience.* 28: 423-441.
54. Baumert M, Maycox PR, Navone F, De Camilli P, and Jahn, R. 1989. Synaptobrevin, an integral membrane protein of 18,000 dalton present in small synaptic vesicles of rat brain. *EMBO J.* 8: 379-384.
55. Johnston K, Cameron P, Stukenbrok H, Jahn R, De Camilli P, and Südhof T.C. 1989. Synaptophysin expressed in CHO cells is targeted to recycling microvesicles analogous to those of PC12 cells. *EMBO J.* 8: 2863-2872.
56. Navone F, Di Gioia G, Hahn R, Browning M, Greengard P, and De Camilli P. 1989. Microvesicles of the neurohypophysis are biochemically related to small synaptic vesicles of presynaptic nerve terminals. *J. Cell Biol.* 109: 3425-3433.
57. Vicari AM, Folli F, Pozza G, Comi GC, Comola M, Canal N, Besana C, Borri A, Tresoldi M, Solimena M, and De Camilli P. 1989. Plasmapheresis in the treatment of Stiff-Man Syndrome. *New Engl. J. Med.* 320: 1499.
58. Malgaroli M, De Camilli P, and Meldolesi J. 1989. Distribution of alpha-latrotoxin receptor in the rat brain by quantitative autoradiography: comparison with the nerve terminal protein synapsin I. *Neuroscience.* 32: 393-404.
59. Südhof TC, Czernik AJ, Kao H, Takei K, Johnston PA, Horiuchi A, Wagner M, Dazanir SD, Perin MS, De Camilli P, and Greengard P. 1989. Synapsins: mosaics of shared and unique domains in a family of synaptic vesicle phosphoproteins. *Science.* 245: 1474-1480.
60. Burger PM, Mehl E, Cameron PL, Maycox PR, Baumert M, Lottspeich F, De Camilli P, and Jahn R. 1989. Synaptic vesicles immunoisolated from cerebral cortex contain high levels of glutamate. *Neuron.* 3: 715-720.
61. Mignery GA, Südhof TC, Takei K, and De Camilli P. 1989. Putative Inositol 1,4,5-Triphosphate receptor similar to ryanodine receptor. *Nature.* 342: 192-195.
62. Matteoli M, Navone F, Haimann C, Cameron PL, Solimena M, and De Camilli P. 1989. Secretory organelles of neurons and their relationship to organelles of other cells. *Cell Biol. Int. Rep.* 13: 981-992.

63. De Camilli P, Solimena M, Moretti M, and Navone F. 1988. Sites of actions of second messengers in the neuronal cytomatrix. In *Intrinsic Determinants of Neuronal Form*. Eds., R.J. Lasek & Black M.M. (Alan R. Liss, New York), pp 487-520.
64. Navone F, Di Gioia G, Matteoli M, and De Camilli P. 1988. Small synaptic vesicles and large dense-core vesicles of neurons are related to two distinct types of vesicles of endocrine cells. In *Molecular Mechanisms of Secretion*. Alfred Benzon Symposium 25. Eds., N.A. Thorn, M. Treiman & O.H. Petersen. (Munksgaard, Copenhagen), pp 433-450.
65. De Camilli P, and Jahn, R. 1990. Pathways to regulated exocytosis in neurons. *Ann. Rev. Physiol.* 52: 625-685.
66. De Camilli P, Benfenati F, Valtorta F, and Greengard P. 1990. Synapsin. *Ann. Rev. Cell Biol.* 6: 433-460.
67. Torri-Tarelli R, Villa A, Valtorta F, De Camilli P, Greengard P, and Ceccarelli B. 1990. Redistribution of synaptophysin and synapsin I during a-latrotoxin-induced release of neurotransmitter at the neuromuscular junction. *J. Cell Biol.* 110: 449-460.
68. Baumert M, Takei K, Hartinger J, Burger PM, Fischer V Mollard G, Maycox, PR, De Camilli, P, and Jahn R. 1990. Protein p29, a novel tyrosine-phosphorylated membrane protein present in small clear vesicles of neurons and endocrine cells. *J. Cell Biol.* 110: 1285-1294.
69. De Camilli P, Takei K, Mignery G, and Südhof, T.C. 1990. InsP3 receptor turnaround. *Nature "Scientific Correspondence"* 344: 495.
70. Solimena M, Folli F, Aparisi R, Pozza G, and De Camilli, P. 1990. Autoantibodies to GABA-ergic neurons and pancreatic β -cells in Stiff-Man Syndrome: a study of 33 cases. *New Engl. J. Med.* 322: 1555-1560.
71. Mandell JW, Townes-Anderson E, Czernik AJ, Cameron R, Greengard P, and De Camilli P. 1990. Localization of the synapsins in the vertebrate retina: absence from ribbon synapses and heterogeneous distribution among conventional synapses. *Neuron*. 5:19-33.
72. Baekkeskov S, Aanstoot HJ, Christgau S, Reetz A, Solimena M, Cascalho M, Folli F, Richter-Olesen H, and De Camilli P. 1990. The 64kD autoantigen in insulin-dependent diabetes is the GABA synthesizing enzyme glutamic acid decarboxylase. *Nature*. 347: 151-156.
73. Matteoli M, Thomas-Reetz A, and De Camilli P. 1990. Small synaptic vesicles and large dense core vesicles: secretory organelles involved in two modes of neuronal signalling. In *Volume Transmission in the Brain*. Eds., K. Fuxe & L. Agnati. (Raven Press, New York), pp 180-193.
74. Klee CB, Guerini D, Krinks MH, De Camilli P, and Solimena M. 1990. Calcineurin: a major Ca^{2+} /calmodulin regulated protein phosphatase in brain. In *Proceeding of the Symposium on Neurotoxicity of Excitatory Aminoacids*. Ed., A. Guidotti. (Raven Press), pp 95-108.
75. Mitsumoto H, Schwartzman MJ, Estes ML, Chou SM, LaFranchise EF, De Camilli P, and Solimena M. 1991. Sudden death and paroximal autonomic dysfunction in Stiff-man syndrome. *J. Neurol.* 238: 91-96.
76. Fletcher TL, Cameron P, De Camilli P, and Banker G. 1991. The distribution of synapsin I and synaptophysin in hippocampal neurons developing in culture. *J. Neurosci.* 11: 1617-1626.
77. Reetz A, Solimena M, Matteoli M, Folli F, Takei K, and De Camilli P. 1991. GABA and pancreatic β -cells: Co-localization of glutamic acid decarboxylase (GAD) and GABA with synaptic-like microvesicles suggests their role in GABA storage and secretion. *EMBO J.* 10: 1275-1284.

78. Cameron PL, Südhof TC, Jahn R, and De Camilli P. 1991. Co-localization of synaptophysin with transferrin receptors: implications for synaptic vesicle biogenesis. *J.Cell Biol.* 115: 151-164.
79. Matteoli M, Takei K, Cameron R, Johnston PA, Hurlbut P, Jahn R, Südhof TC, and De Camilli P. 1991. Association of rab3 with synaptic vesicles at late stages of the secretory pathway. *J. Cell Biol.* 115: 625-633.
80. Takei K, Stukenbrok H, Metcalf A, Mignery G, Südhof TC, Volpe P, and De Camilli P. 1991. Ca²⁺ stores in Purkinje neurons: Endoplasmic reticulum subcompartments demonstrated by the heterogeneous distribution of the INSP3 receptor, Ca²⁺-ATPase and calsequestrin. *J. Neurosci.* 12: 489-505.
81. Mandell JW, Czernik AJ, De Camilli P., Greengard P, and Townes-Anderson E. 1991. Differential expression of synapsins I and II among rat retinal synapses. *J. Neurosci.* 12: 1736-1749.
82. Matteoli M, and De Camilli P. 1991. Molecular mechanisms in neurotransmitter release. *Curr. Op. Neurobiol.* 1: 91-97.
83. Solimena M, and De Camilli P. 1991. Autoimmunity to glutamic acid decarboxylase (GAD) in stiff-man syndrome and insulin-dependent diabetes mellitus. *Trends Neurosci.* 14: 452-457.
84. De Camilli P. 1991. Cosecretion of multiple signal molecules from endocrine cells via distinct exocytotic pathways. *Trends Pharmacol. Sci.* 12: 446-448.
85. Jahn R, and De Camilli P. 1991. Membrane proteins of synaptic vesicles: markers for neurons and neuroendocrine cells, and tools for the study of neurosecretion. In *Markers for Neuronal and Endocrine cells*. Eds., M. Gratzl & K. Langley. (VCH-Verlagsgesellschaft, Weinheim/FRG), pp 23-92.
86. Matteoli M, Takei K, Perin MS, Südhof TC, and De Camilli P. 1992. Exo-endocytotic recycling of synaptic vesicles in developing processes of cultured hippocampal neurons. *J. Cell Biol.* 117: 849-861.
87. Espreafico EM, Cheney RE, Matteoli M, Nascimento AAC, De Camilli P., Larson RE, and Mooseker MS. 1992. Primary structure and cellular localization of chicken brain myosin-V (p190), an unconventional myosin with calmodulin light chains. *J. Cell Biol.* 119: 1541-1557.
88. Cameron P, and De Camilli P. 1992. Traffic of synaptic vesicles in neurons and of synaptic-like microvesicles in endocrine cells. In *Molecular Neurobiology*. Proceedings of the 2nd NIMH Conference on Molecular Neurobiology. Eds., R. Scheller, R. Tsien, & S. Zalcman. pp 80-89.
89. Matteoli M, and De Camilli P. 1992. Exo-Endocytotic Recycling of Synaptic vesicles in developing neurons. In *Botulinum, Tetanus Neurotoxins: Neurotransmission & Biomedical Aspects*. Ed., B.F. DasGupta. (Plenum Press, New York) pp 153-163.
90. Folli F, Solimena M, Cofiell R, Austoni M, Tallini G, Fassetta G, Bates D, Cartlidge N, Bottazzo GF, Piccolo G, and De Camilli P. 1993. Autoantibodies to a 128kD synaptic protein in three women with the Stiff-man syndrome and breast cancer. *New Engl. J. Med.* 328: 546-551.
91. Burton J, Roberts D, Montaldi M, Novick P, and De Camilli P. 1993. A mammalian guanine-nucleotide releasing protein enhances function of yeast secretory protein Sec4. *Nature.* 361: 464-467.
92. Solimena M, Aggujaro D, Dirkx R, Butler MH De Camilli P., and Hayday A. 1993. Association of GAD65, but not of GAD67, with the Golgi complex is mediated by the NH2-terminal region. *Proc. Natl. Acad. Sci. USA.* 90:3073-3077.
93. Thomas-Reetz A, Hell JW, During MJ, Walch-Solimena C, Jahn R, and De Camilli P. 1993. A g-aminobutyric acid transporter driven by a proton pump is present in synaptic-like microvesicles of pancreatic β cells. *Proc. Natl. Acad. Sci. USA.* 90: 5317-5321.

94. Walch-Solimena C, Takei K, Marek K, Midyett K, Südhof TC, De Camilli, P, and Jahn R. 1993. Synaptotagmin: a membrane constituent of neuropeptide-containing large dense-core vesicles. *J. Neurosci.* 13: 3895-3903.
95. Fyske EM, Takei K, Walch-Solimena C, Geppert M, Jahn R, De Camilli P, and Südhof TC 1993. Relative properties and localizations of synaptic vesicle protein isoforms: the case of the synaptophysins. *J. Neurosci.* 13: 4997-5007.
96. Pugliese A, Gianani R, Solimena M, Awdeh ZL, Alper C, Erlich HA, De Camilli P, and Eisenbarth GS. 1993. Association of HLA-DQB1*0201 with stiff-man syndrome. *J. Clin. Endocrinol. Metab.* 77: 1550-1553.
97. Mundigl O, Matteoli M, Daniell L, Thomas-Reetz A, Metcalf A, Jahn R, and De Camilli P. 1993. Synaptic vesicle proteins and early endosomes in cultured hippocampal neurons: differential effects of brefeldin A in axon and dendrites. *J. Cell Biol.* 122: 1207-1221.
98. Blasi J, Chapman ER, Link E, Binz T, Yamasaki S, De Camilli P, Südhof TC, Niemann H, and Jahn R. 1993. Botulinum neurotoxin A selectively cleaves the synaptic protein SNAP-25. *Nature.* 365: 160-163.
99. Butler MH, Solimena M, Dirkx R, Hayday A, and De Camilli P. 1993. Identification of a dominant epitope of glutamic acid decarboxylase (GAD-65) recognized by autoantibodies in Stiff-man syndrome. *J. Exp. Med.* 178: 2097-2106.
100. De Camilli P, Thomas A, Cofiell R, Folli F, Lichte B, Piccolo G, Meinck HM, Austoni M, Fassetta G, Bottazzo GF, Bates D, Cartlidge N, Solimena M, and Kilimann MW. 1993. The synaptic vesicle-associated protein amphiphysin is the autoantigen of Stiff-man syndrome with breast cancer. *J. Exp. Med.* 178: 2219-2223.
101. De Camilli P. 1993. Exocytosis is a SNAP. *Nature "News and Views"* 364: 387-388.
102. Südhof TC, De Camilli P, Niemann H, and Jahn R. 1993. Membrane fusion machinery: insights from synaptic proteins. *Cell.* 75: 104.
103. Solimena M, and De Camilli P. 1993. Diabetes: Spotlight on a neuronal enzyme. *Nature "News and Views"* 366: 15-17.
104. Thomas-Reetz A, and De Camilli P. 1994. A role for synaptic vesicles in non-neuronal cells: clues from pancreatic β -cells and from chromaffin cells. *Faseb J.* 8: 209-216.
105. Caporaso GL, Takei K, Gandy SE, Matteoli M, Mundigl O, Greengard P, and De Camilli P. 1994. Microscopic and biochemical examination of the intracellular trafficking of the alzheimer β /A4 amyloid precursor protein. *J. Neurosci.* 14: 3122-3138.
106. Takei K, Mignery G, Mugnaini E, Südhof TC, and De Camilli P. 1994. Endoplasmic reticulum cisternal stacks in cerebellar Purkinje cells: role of the inositol-3-phosphate receptor in their formation. *Neuron.* 12: 327-342.
107. Garcia EP, Gatti E, Butler MH, Burton J, and De Camilli P. 1994. A rat brain homologue of the yeast protein Sec1 binds syntaxin. *Proc. Natl. Acad. Sci. USA.* 91: 2003-2007.
108. Cameron P, Mundigl O, De Camilli P. 1994. Traffic of synaptic vesicle proteins in polarized and non-polarized cells. *J. Cell Sci., Suppl.* 17: 93-100.
109. Burton J, and De Camilli P. 1994. MSS4. In Guidebook to Small GTPases. Eds., J. Sambrook & J. Tooze. (Oxford Press, New York).
110. Burton J, and De Camilli P. 1994. A novel mammalian guanine nucleotide exchange factor (GAF) specific for Rab proteins. In Molecular and Cellular Mechanisms of Neurotransmitter Release. Proceedings from the Wenner-Gren Center International Symposium. Eds, L. Stjarne, P. Greengard, S. Grillner, T. Hokfelt, & D. Ottoson. (Raven Press, New York), pp 109-119.

111. McPherson PS, Czernik AJ, Chilcote TJ, Onofri F, Benfenati F, Greengard P, Schlessinger J, and De Camilli P. 1994. Interaction of Grb2 via its SH3 domains with synaptic proteins including synapsin I. *Proc. Natl. Acad. Sci. USA.* 91: 6486-6490.
112. McPherson P, and De Camilli P. 1994. Recycling and biogenesis of synaptic vesicles. *Seminars in the Neurosciences.* 6: 137-147.
113. Galli T, Chilcote TJ, Mundigl O, Binz T, Niemann H, and De Camilli P. 1994. Tetanus toxin-mediated cleavage of cellubrevin impairs exocytosis of transferrin receptor containing vesicles in CHO cells. *J. Cell Biol.* 125: 1015-1024.
114. Geppert M, Bolshakov VY, Siegelbaum SA, Takei K, De Camilli P, Hammer RE, Südhof TC. 1994. Rab3A function in neurotransmitter release. *Nature.* 369: 493-497.
115. Fletcher T, De Camilli P, and Bunker G. 1994. Synaptogenesis in hippocampal cultures: axons and dendrites become competent to form synapses at different stages of neuronal development. *J. Neurosci.* 14: 6695-6706.
116. Solimena M, Dirkx R, Radzynski M, Mundigl O, and De Camilli P. 1994. A signal located within amino acids 1-27 of GAD65 is responsible for its targeting to the Golgi complex region. *J. Cell Biol.* 126: 331-341.
117. Geppert M, Ullrich B, Green DG, Takei K, Daniell L, De Camilli P, Südhof TC, and Hammer R.E. 1994. Expression of synapsin in photoreceptor cell synapses in transgenic mice: targeting domains and functional implications. *EMBO J.* 3: 3720-3727.
118. Mundigl O, and De Camilli P. 1994. Formation of synaptic vesicles. *Curr. Op. Cell Biol.* 6: 561-567.
119. Solimena M, Butler MH, and De Camilli P. 1994. GAD, diabetes, and stiff-man syndrome: some progress and more questions. *J. Endocrinol. Invest.* 126: 331-341.
120. Fischer v Mollard G, Stahl B, Walch-Solimena C, Takei K, Daniell L, Khoklatchev A, De Camilli P, Südhof TC, and Jahn R. 1994. Localization of Rab 5 to synaptic vesicles identified endosomal intermediate in synaptic vesicle recycling pathway. *Eur. J. Cell Biol.* 65: 319-326.
121. David C, Solimena M, and De Camilli P. 1994. Autoimmunity in Stiff-man syndrome with breast cancer is targeted to the c-terminal region of human amphiphysin, a protein homologous to the yeast proteins, Rvs167 and Rvs161. *FEBS Lett.* 351: 73-79.
122. McPherson PS, Takei K, Schmid SL, and De Camilli P. 1994. P145, a major Grb2-binding protein in brain, is colocalized with dynamin in nerve terminals where it undergoes activity-dependent dephosphorylation. *J. Biol. Chem.* 269: 30132-30139.
123. Pugliese A, Eisenbarth GS, De Camilli P, and Solimena M. 1994. Genetics of susceptibility and resistance to insulin-dependent diabetes in stiff-man syndrome. *Lancet.* 144: 1027-1028.
124. Burton J, Burns ME, Augustine GJ, and De Camilli P. 1994. Specific interactions of Mss4 with members of the Rab GTPase subfamily. *EMBO J.* 13: 5547-5558.
125. Burton J, and De Camilli P. 1994. Expression, purification and functional assay of Mss4. *Meth. in Enzymol: Small GTPases and Their Regulators, Part C, Proteins Involved in Transport.* 257: 93-98.
126. Li C, Takei K, Geppert M, Daniell L, Chapman E, De Camilli P, and Südhof TC. 1994. Synaptic targeting of rabphilin-3A, a synaptic vesicle Ca²⁺/phospholipid-binding protein, depends on rab3A/3C. *Neuron.* 13: 1-20.
127. Dirkx R, Thomas A, Li L, Lernmark Å, Sherwin RS, De Camilli P, and Solimena M. 1995. GAD67 is targeting to membranes via an interaction with the NH₂-terminal region of GAD65. *J. Biol. Chem.* 270: 2241-2246.
128. Solimena M, and De Camilli P. 1995. Coxsackieviruses and diabetes. *Nature Medicine "News & Views"* 1: 25-26.

129. Takei K, McPherson P, Schmid SL, and De Camilli P. 1995. Tubular membrane invaginations coated in dynamin rings are induced by GTP-gs in nerve terminals. *Nature*. 374: 186-190.
130. Chilcote T, Galli T, Mundigl O, Takei K, McPherson P, and De Camilli P. 1995. Cellubrevin and synaptobrevins: similar subcellular localization and biochemical properties in PC12 cells. *J. Cell Biol.* 129: 219-231.
131. Kraszewski K, Mundigl O, Daniell L, Verderio C, Matteoli M, and De Camilli P. 1995. Synaptic vesicle dynamics in living cultured hippocampal neurons visualized with CY3-conjugated antibodies directed against the luminal domain of synaptotagmin. *J. Neurosci.* 15: 4328-4342.
132. Garcia EP, McPherson PS, Takei K, Chilcote TJ, and De Camilli P. 1995. rbSec1A and B colocalize with syntaxin 1 and SNAP-25 throughout the axon, but are not in a stable complex with syntaxin. *J. Cell Biol.* 129: 105-120.
133. Mundigl O, Verderio C, Kraszewski K, De Camilli P, and Matteoli M. 1995. A radioimmunoassay to monitor synaptic activity in hippocampal neurons *in vitro*. *Europ. J. Cell Biol.* 66: 246-256.
134. Toikkanen J, Gatti E, Takei K, Saloheimo M, Olkkonen V, Soderlund H, De Camilli P, and Keränen S. 1995. Yeast protein translocation complex: isolation of two genes SEB1 and SEB2 encoding proteins homologous to the Sec61 β subunit. *Yeast*. 12: 425-438.
135. Matteoli M, Verderio C, Kraszewski K, Mundigl O, Coco S, Fumagalli,G. and De Camilli P. 1995. Mechanisms of synaptogenesis in hippocampal neurons in primary culture. *J. Physiol.* 89: 51-55.
136. Bauerfeind R, David C, Galli T, McPherson PS, Takei K, and De Camilli P. 1995. Molecular mechanisms in synaptic vesicle endocytosis. In *Cold Spring Harbor Symposium on Quantitative Biology*. (Cold Spring Harbor Laboratory Press, New York), vol. 60, pp 397-404.
137. Galli T, Garcia EP, Mundigl O, Chilcote TJ, and De Camilli P. 1995. v- and t-SNAREs in neuronal exocytosis: a need for additional components to define sites of release. *Neuropharmacology*. 34: 1351-1360.
138. De Camilli P. 1995. Keeping synapses up to speed. *Nature "News & Views"* 375: 450-451.
139. De Camilli P, Takei K, and McPherson P. 1995. The function of dynamin in endocytosis. *Curr. Op. Neurobiol.* 5: 559-565.
140. De Camilli P. 1995. The Eighth Datta Lecture: Molecular mechanisms in synaptic vesicle recycling. *FEBS Lett.* 369: 3-12.
141. McPherson PS, Garcia EP, Slepnev V, David C, Zhang X, Grabs D, Sossin WS, Bauerfeind R, Nemoto Y, and De Camilli P. 1996. A presynaptic inositol-5-phosphatase. *Nature*. 379: 353-357.
142. David C, McPherson PS, Mundigl O, and De Camilli P. 1996. A role of amphiphysin in synaptic vesicle endocytosis supported by its binding to dynamin in nerve terminals. *Proc. Natl. Acad. Sci. USA*. 93: 331-335.
143. Solimena M, Dirkx R, Butler MH, Hermel JM, Guernaccia J, Marek K, David C, and De Camilli P. 1996. Stiff-man syndrome and glutamic acid decarboxylase: an updated view. In *International GABA Symposium*. Eds., C. Tanaka & N.G. Bowery. (Birkhäuser Verlag, Basel, Boston, Berlin), pp 31-43.
144. Galli T, McPherson PS, and De Camilli P. 1996. The Vo sector of V-ATPase, synaptobrevin and synaptophysin are associated on synaptic vesicles in a Triton X-100 resistant, freeze-thawing sensitive complex. *J. Biol. Chem.* 271: 2193-2198.
145. De Camilli P, and Takei K. 1996. Molecular mechanisms in synaptic vesicle endocytosis and recycling. *Neuron*. 16: 481-486.
146. De Camilli P, Emr SD, McPherson PS, and Novick P. 1996. Phosphoinositides as regulators in membrane traffic. *Science*. 271: 1533-1539.

147. Takei K, Mundigl O, Daniell L, and De Camilli P. 1996. The synaptic vesicle cycle: a single vesicle budding step involving clathrin and dynamin. *J. Cell Biol.* 133: 1237-1250.
148. Kraszewski K, Daniell L, Mundigl O, and De Camilli P. 1996. Mobility of synaptic vesicles in nerve endings monitored by recovery from photobleaching of synaptic vesicle associated fluorescence. *J. Neurosci.* 16: 5905-5913.
149. Cases-Langhoff C, Voss B, Garner AM, Appeltauer U, Takei K, Kindler S, Veh RW, De Camilli P, Gundelfinger ED, and Garner G. 1996. Piccolo, a novel 420kDa protein associated with the presynaptic cytomatrix. *Eur. J. Cell Biol.* 69: 214-223.
150. Burton JL, Slepnev V, and De Camilli P. 1997. An evolutionary conserved domain in a subfamily of Rabs is crucial for the interaction with the guanyl-nucleotide exchange factor Msx4. *J. Biol. Chem.* 272: 3663-3668.
151. Rosin L, De Camilli P, Butler MH, Solimena M, Schmitt HP, Norgenthaler N, and Meinck HM. 1998. Stiff-man syndrome in a woman with breast cancer: an uncommon central nervous system paraneoplastic syndrome. *Neurology.* 50: 94-98.
152. Schwartz JH, and De Camilli P. 1997. Synthesis and trafficking of neuronal protein. In *Principles of Neural Science*. Eds., E. Kandel & T. Jessell. 4th Edition. (McGraw Hill), pp 88-104.
153. Ikin AF, Annaert WG, Takei K, De Camilli P, Jahn R, Greengard P, and Buxbaum J. 1996. Alzheimer amyloid protein precursor is localized in nerve terminal preparations to Rab5-containing vesicular organelles distinct from those implicated in the synaptic vesicle pathway. *J. Biol. Chem.* 271: 31783-31786.
154. Bauerfeind R, Galli T, and De Camilli P. 1997. Molecular mechanisms in synaptic vesicle recycling. *J. Neurocytology.* 25: 701-715.
155. Grabs D, Slepnev VI, Songyang Z, David C, Lynch M, Cantley LC, and De Camilli P. 1997. The SH3 domain of amphiphysin binds the proline-rich domain of dynamin at a single site that defines a new SH3 binding consensus sequence. *J. Biol. Chem.* 272: 13419-13425.
156. Li JY, De Camilli P, Dahlström A. 1997. Intraneuronal trafficking of amphiphysin and synaptotagmin in the rat PNS and the spinal cord. *Eur. J. Neurosci.* 9: 1864-1874.
157. Solimena M, and De Camilli P. 1997. From Th1 to Th2: diabetes immunotherapy shifts gears. *Nature Medicine "News & Views"* 2: 1311-1312.
158. Butler MH, David C, Ochoa GC, Freyberg Z, Daniell L, Grabs D, Cremona O, and De Camilli P. 1997. Amphiphysin II (SH3P9; BIN1), a member of the amphiphysin/RVS family, is concentrated in the cortical cytomatrix of axon initial segments and nodes of Ranvier in brain and around T-tubules in skeletal muscle. *J. Cell Biol.* 137: 1355-1367.
159. Shupliakov O, Löw P, Grabs D, Gad H, Chen H, David C, De Camilli P, and Brodin L. 1997. Synaptic vesicle endocytosis impaired by disruption of dynamin-SH3 domain interactions. *Science.* 276: 259-263.
160. Guo W, Roth D, Gatti E, De Camilli P, and Novick P. 1997. Identification and characterization of homologues of the exocyst component Sec10p. *FEBS Letts.* 404: 135-139.
161. Arribas M, Regazzi R, Garcia E, Wollheim C, and De Camilli P. 1997. The stimulatory effect of rabphilin 3A on regulated exocytosis from insulin-secreting cells does not require an association-dissociation cycle with membranes mediated by Rab3. *Eur. J. Cell Biol.* 74: 209-216.
162. Ringstad N, Nemoto Y, and De Camilli P. 1997. The SH3p4/SW3p8/SW3p13 protein family: binding partners for synaptotagmin and dynamin via a Grb2-like SH3 domain. *Proc. Natl. Acad. Sci. USA.* 94: 8569-8574.

163. Cremona O, and De Camilli P. 1997. Synaptic vesicle endocytosis. *Curr. Op. Neurobiol.* 7: 323-330.
164. Srinivasan S, Seaman M, Nemoto Y, Daniell L, Suchy SF, Emr S, De Camilli P, and Nussbaum R. 1997. Disruption of three phosphatidylinositol-pholyposphate 5-phosphatase genes from *Saccharomyces cerevisiae* results in pleiotropic abnormalities of vacuole morphology, cell shape, and osmohomeostasis. *Eur. J. Cell Biol.* 74: 350-360.
165. Bauerfeind R, Takei K and De Camilli P, 1997. Amphiphysin I is associated with coated endocytic intermediates and undergoes stimulation-dependent dephosphorylation in nerve terminals. *J. Biol. Chem.* 272: 30984-30992.
166. Mundigl O, Ochoa GC, David C, Slepnev V, Kabanov A, and De Camilli P. 1998. Amphiphysin I antisense oligonucleotides inhibit neurite outgrowth in cultured hippocampal neurons. *J. Neurosci.* 18: 93-103.
167. Nemoto Y, Arribas M, Haffner C, and De Camilli P. 1997. Synaptjanin 2: a novel synaptjanin isoform with a distinct targeting domain and expression pattern. *J. Biol. Chem.* 272: 30817-30821.
168. Onofri F, Giovedi S, Vaccaro P, Czernik AJ, Valtorta F, De Camilli P, and Greengard P. 1997. Synapsin I interacts with c-SRC and stimulates its tyrosine kinase activity. *Proc. Natl. Acad. Sci. USA*. 94: 12168-12173.
169. Slepnev VI and De Camilli P. 1998. Endocytosis: an overview. In *Self-Assembling Complexes for Gene Delivery: From Chemistry to Clinical Trial*. Eds., L. Seymour, A. Kabanov & P. Felgner. (John Wiley Press), pp 71-88.
170. Bauerfeind R, David C, Grabs D, McPherson PS, Nemoto Y, Slepnev VI, and De Camilli P. 1997. Recycling of Synaptic Vesicles. In *Catecholamines - Bridging Basic Science with Clinical Medicine*. Eds., D.S. Goldstein, G. Eisenhofer & R. McCarty. (Academic Press), pp 253-257.
171. Haffner C, Takei K, Chen H, Ringstad N, Hudson A, Butler MH, Salcini AE, Di Fiore PP, and De Camilli P. 1997. Synaptjanin 1, localization on coated endocytic intermediates in nerve terminals and interaction of its 170 kDa isoform with Eps 15. *FEBS Lett.* 419: 175-180.
172. De Camilli P, Nemoto Y. 1999. Synaptjanin. In *Guidebook to the cytoskeletal and motor proteins*. Eds., T.E. Kreis & R.D. Vale. (Oxford University Press), pp 541-544.
173. Floyd S, Butler MH, Cremona O, David C, Freyberg Z, Zhang A, Solimena M, Tokunaga A, Ishizu H, Tsutsui K, and De Camilli P. 1998. Expression of amphiphysin I, an autoantigen of paraneoplastic neurological syndromes, in breast cancer. *Mol. Med.* 4: 29-39.
174. Volchuk A, Narin S, Grabs D, De Camilli P, and Klip A. 1997. Inhibition of glut4 endocytosis by perturbation of dynamin II with an amphiphysin-SH3 domain in 3T3-L1 adipocytes. *J. Biol. Chem.* 273: 8169-8176.
175. Schmierer K, Valdueza JM, Bender A, De Camilli P, David C, Solimena M, and Zschenderlein R. 1997. Atypical stiff-man syndrome with spinal MRI-findings, amphiphysin autoantibodies and immunosuppression. *Neurology* . 51: 250-252.
176. Schmid SL, McNiven MA, and De Camilli P. 1998. Dynamin and its partners: a progress report. *Curr. Opin. Cell Biol.* . 10: 504-512.
177. Coco S, Verderio C, De Camilli P and Matteoli M. 1998. Calcium dependence of synaptic vesicle recycling before and after synaptogenesis. *J. Neurochem.* 71: 1987-1992.
178. Floyd S and De Camilli P. 1998. Endocytosis proteins and cancer: a potential Link? *Trends Cell Biol.* 8: 299-301.
179. Takei K, Haucke V, Slepnev V, Farsad K, Salazar M, Chen H, and De Camilli P. 1998. Generation of coated intermediates of clathrin-mediated endocytosis on protein-free liposomes. *Cell*. 94: 131-141.

180. Antoine JC, Absi L, Honnorat J, Boulesteix JM, de Brouker TH, Vial C, Trouillas P, De Camilli P, and Michel D. 1999. Anti-amphiphysin antibodies are associated with various paraneoplastic neurological syndromes and tumors. *Archives of Neurology*. 56: 172-177.
181. Chen H, Fre S, Slepnev VI, Capua MR, Takei K, Butler MH, Di Fiore PP and De Camilli P. 1998. Epsin, an EH domain binding protein implicated in clathrin-mediated endocytosis. *Nature*. 394: 793-797.
182. Slepnev V, Ochoa GC, Butler MH, Grabs D, and De Camilli P. 1998. Role of phosphorylation in the regulation of the assembly of endocytic coat complexes. *Science*. 281: 821-824.
183. Singer-Kruger B, Nemoto Y, Daniell L, Ferro-Novick S, and De Camilli P. 1998. Synaptojanin family members are implicated in endocytic membrane traffic in yeast. *J. Cell Sci.* 111: 3347-3356.
184. Chen H, Slepnev VI, Di Fiore PP, and De Camilli P. 1999. The interaction of epsin and EPS15 with the clathrin adaptor AP-2 is inhibited by mitotic phosphorylation and enhanced by stimulation-dependent dephosphorylation in nerve terminals. *J. Biol. Chem.* 274: 3257-3260.
185. Saiz A, Dalmau J, Butler M, Chen Q, Delattre JY, De Camilli P, and Graus F. 1999. Anti-amphiphysin I antibodies in patients with paraneoplastic neurological disorders associated with small cell lung carcinoma. *J. Neurol. Neurosurg. Psychiatry*. 66: 214-217.
186. Nemoto Y and De Camilli P. 1999. Recruitment of an alternatively spliced form of synaptojanin 2 to mitochondria by the interaction with the PDZ domain of a mitochondrial outer membrane protein. *EMBO J.* 18: 2991-3006.
187. Salcini AE, Chen H, De Camilli P, and Di Fiore PP. 1999. Molecules in focus: epidermal growth factor pathway substrate #15 (EPS 15). *Int. J. Bioch. Cell Biol.* 31: 805-809.
188. Takei K, Slepnev VI, Haucke V, and De Camilli P. 1999. Functional partnership between amphiphysin and dynamin in clathrin-mediated endocytosis. *Nat. Cell Biol.* 1: 33-39.
189. Ferracci F, Fassetta G, Butler MH, Floyd S, Solimena M, and De Camilli P. 1999. Autoantibodies to axon initial segments and nodes of ranvier in a case of lower motor neuron disease associated with breast cancer. *Neurology*. 53: 852-855.
190. Verderio C, Coco S, Bacci A, Rosetto O, De Camilli P, Montecucco C, Matteoli M. 1999. Tetanus toxin blocks the exocytosis of synaptic vesicles clustered at synapses but not of synaptic vesicles in isolated axons. *J. Neurosci.* 19: 6723-6732.
191. Lai MM, Hong JJ, Ruggiero AM, Burnett PE, Slepnev VI, De Camilli P and Snyder, SH. 1999. The calcineurin/dynamin 1 complex as a calcium sensor for synaptic vesicle endocytosis. *J. Biol. Chem.* 274: 25963-25966.
192. Haucke V, and De Camilli P. 1999. AP-2 recruitment to synaptotagmin stimulated by tyrosine-based endocytic motifs. *Science*. 285: 1268-1271.
193. Ringstad N, Gad H, Low P, Di Paolo G, Brodin L, Shupliakov O, and De Camilli P. 1999. Endophilin/SH3p4 is required for the transition from early to late stages in clathrin-mediated synaptic vesicle endocytosis. *Neuron*. 24: 143-154.
194. Rosenthal JA, Chen H, Slepnev VI, Pellegrini L, Salcini AE, Di Fiore PP, and De Camilli P. 1999. The epsins define a family of proteins which interact with components of the clathrin coat and contain a new protein module. *J. Biol. Chem.* 274: 33959-33965.
195. Cremona O, Di Paolo G, Wenk M, Luthi A, Kim WT, Takei K, Daniell L, Nemoto Y, Flavell RA, McCormick DA and De Camilli P. 1999. Essential role of phosphoinositide metabolism in synaptic vesicle recycling. *Cell*. 99: 179-188.
196. Tang Y, Hu L, Miller WE, Ringstad N, Hall RA, Pitcher JA, De Camilli P, and Lefkowitz RJ. 1999. Identification of the SH3p4/p8/p13 protein family as novel

- binding partners for the b1-adrenergic receptor. *Proc. Natl. Acad. Sci. USA.* 96: 12559-12564.
- 197. Cremona O, Nimmakayalu M, Haffner C, Bray-ward P, Ward C and De Camilli P. 2000. Assignment of synaptjanin I gene to human chromosome 21q22.2 and to mouse chromosome 16c3-4. *Cytogenet. Cell Genet.* 88: 89-90.
 - 198. De Camilli P, Slepnev VI, Shupliakov O, and Brodin L. 2000. Synaptic vesicle endocytosis. In *Synapses*. Eds., M. Cowan, T. Südhof & C. Stevens. (The Johns Hopkins University Press), pp 217-274.
 - 199. De Camilli P, Haucke V, Takei K, and Mugnaini E. 2000. Structure of synapses. In *Synapses*. Eds., M. Cowan, T. Südhof & C. Stevens. (The Johns Hopkins University Press), pp 89-133.
 - 200. Haffner C, Di Paolo G, Rosenthal JA, and De Camilli P. 2000. Direct interaction of the 170 kDa isoform of synaptjanin 1 with clathrin and with the clathrin adaptor AP-2. *Curr. Biol.* 10: 471-474.
 - 201. Butler MH, Hayashi A, Ohkoshi N, Villmann C, Becker CM, Feng G, De Camilli P, and Solimena M. 2000. Autoimmunity to gephyrin in stiff-man syndrome. *Neuron.* 26: 307-312.
 - 202. Hyman J, Chen H, Di Fiore PP, De Camilli P, and Brunger AT. 2000. Epsin 1 undergoes nucleocytosolic shuttling and its ENTH domain, structurally similar to armadillo and HEAT repeats, interacts with the transcription factor PLZF. *J. Cell Biol.* 149: 537-546.
 - 203. Slepnev VI, Ochoa GC, Butler MH, and De Camilli P. 2000. Tandem arrangement of clathrin and AP-2 binding domains in amphiphysin 1, and disruption of clathrin coat function mediated by amphiphysin fragments comprising these sites. *J. Biol. Chem.* 275: 17583-17589.
 - 204. Takei K, Slepnev V, and De Camilli P. 2001. Reconstitution of liposome interactions with dynamin and amphiphysin. *Meth. Enzymol.* 329: 478-486.
 - 205. Onofri F, Giovedi S, Valtorta F, Borbone LB, De Camilli P, Greengard P, and Benfenati F. 2000. Specificity of the binding of synapsin I to Src homology-3 domains. *J. Biol. Chem.* 275: 29857-29867.
 - 206. Gad H, Ringstad N, Löw P, Kjaerulff O, Gustafsson J, Wenk M, Di Paolo G, Nemoto Y, Crum J, Ellisman MH, De Camilli P, Shupliakov O, and Brodin L. 2000. Fission and uncoating of clathrin-coated vesicles at the synapse is perturbed by disruption of interactions with the SH3 domain of endophilin. *Neuron.* 27: 301-312.
 - 207. Nemoto Y, Kearns BG, Wenk M, Chen H, Mori K, Alb JG, De Camilli P, and Bankaitis VA. 2000. Functional characterization of a mammalian Sac1 and mutants exhibiting substrate specific defects in phosphoinositide phosphatase activity. *J. Biol. Chem.* 275: 34293-34305.
 - 208. Ochoa GC, Slepnev VI, Neff L, Ringstad N, Takei K, Daniell L, Cao H, McNiven M, Baron R, and De Camilli P. 2000. A functional link between dynamin and the actin cytoskeleton at podosomes. *J. Cell Biol.* 150: 377-389.
 - 209. Solimena M, Butler M and De Camilli P. 2000. Autoimmunity in stiff-man syndrome. In *Autoantigens, Autoantibodies, Autoimmunity* (Pabst SciencePublishers) (Lengerich-Berlin-Prague-Riga-Vienna-Zagreb), pp 601-610.
 - 210. Hauke V, Wenk MR, Chapman ER, Farsad K, and De Camilli P. 2000. Dual interaction of synaptotagmin with m2- and a-adaptin facilitates clathrin-coated pit nucleation. *EMBO J.* 19: 6011-6019.
 - 211. Cremona O, and De Camilli P. 2001. Phosphoinositides in membrane traffic at the synapse. *J. Cell Sci.* 114: 1041-1052.
 - 212. Slepnev V, and De Camilli P. 2000. Accessory factors in clathrin dependent synaptic vesicle endocytosis. *Nature Neurosci. Rev.* 1: 161-172.
 - 213. Solimena M, and De Camilli P. 2000. Synaptic autoimmunity and the Salk factor. *Neuron.* 28: 309-316.

214. Meinck H-M, Maile S, Faber L, Morgenthaler N, Seissler J, Butler M, Solimena M, De Camilli P and Scherbaum WA. 2001. Antibodies against glutamic acid decarboxylase (GAD): prevalence in neurological diseases. *J. Neurol. Neurosurg. Psych.* 1: 100-103.
215. De Camilli P, and Carew T. 2000. Nobel celebrates the neurosciences: Modulatory signaling in the brain. *Cell*. 103: 829-833.
216. Floyd SR, Porro EB, Slepnev VI, Ochoa GC, Tsai LH and De Camilli P. 2001. Amphiphysin 1 binds the cdk5 regulatory subunit p35 and is phosphorylated by cdk5 and cdc2. *J. Biol. Chem.* 276: 8104-8110.
217. Bacci A, Coco S, Pravettoni E, Frassonni C, Verderio C, De Camilli P and Matteoli M. 2001. Postsynaptic activity regulates presynaptic vesicle recycling. *J. Neurosci.* 21: 6588-6596.
218. Salcini AE, Hilliard MA, Croce A, Arbucci S, Luzzi P, Tacchetti C, Daniell L, De Camilli P, Pelicci PG, Di Fiore PP, and Buzzicalupo P. 2001 EHS-1, a *C. elegans* homologue of EPS 15, acts in synaptic vesicles recycling. *Nat. Cell Biol.* 8: 755-760.
219. Berghs S, Ferracci F, Maksimova E, Gleason S, Leszczynski N, Butler M, De Camilli P, and Solimena M. 2001. Autoimmunity to bIV spectrin in paraneoplastic lower motor neuron syndrome. *Proc. Natl. Acad. Sci. USA*. 98: 6945-6950.
220. Chang S, and De Camilli P. 2001. Glutamate-mediated regulation of actin-based in axonal filopodia. *Nat. Neurosci.* 8: 787-793.
221. Di Fiore PP, and De Camilli P. 2001. Endocytosis and signaling: an inseparable twinship. *Cell (review)*. 106: 1-4.
222. Ringstad N, Nemoto Y, and De Camilli P. 2001. Differential expression of endophilin 1 and 2 dimers at central nervous system synapses. *J. Biol. Chem.* 276: 40424-40430.
223. Nemoto Y, Wenk MR, Watanabe M, Daniell L, Murakami T, Ringstad N, Yamada H, Takei K, and De Camilli P. 2001. Identification and characterization of a synaptotjanin 2 splice isoform predominantly expressed in nerve terminals. *J. Biol. Chem.* 276: 41133-41142.
224. Schmierer K, De Camilli P, Solimena M, and Zschenderlein R. 2002. Paraneoplastic stiff person - syndrome with amphiphysin autoantibodies: no tumor progression over five years. *Neurology*. 58: 148.
225. Luthi A, Di Paolo G, Cremona O, Daniell L, De Camilli P, and McCormick DA. 2001. Stability of GABAergic transmission in primary cultures of cortical neurons: involvement of synaptotjanin 1. *J. Neurosci.* 21: 9101-9111.
226. Wenk MR, Pellegrini L, Klenchin VA, Di Paolo G, Chang S, Daniell L, Arioka M, Martin TF, and De Camilli P. 2001. PIP kinase Ig is the major PI(4,5)P₂ synthesizing enzyme at the synapse. *Neuron*. 32: 79-88.
227. Farsad K, Ringstad N, Takei K, Floyd SR, and De Camilli P. Generation of high curvature membranes mediated by direct endophilin-bilayer interactions. 2001. *J. Cell Biol.* 155: 193-200.
228. De Camilli P, Chen H, Hyman J, Panepucci E, Bateman A, and Brunger AT. 2002. The ENTH Domain. *FEBS Lett.* 513: 1-8.
229. Di Paolo G, Sankaranarayanan S, Wenk MR, Daniell L, Perucco E, Caldarone BJ, Flavell R, Picciotto MR, Ryan TA, Cremona O, and De Camilli P. 2002. Decreased synaptic vesicle recycling efficiency and cognitive deficits in amphiphysin 1 knockout mice. *Neuron*. 33: 789-804.
230. Lee K, and De Camilli P. 2002. Dynamin at actin tails. *Proc. Natl. Acad. Sci. USA*. 99: 161-166.
231. Wenk MR, and De Camilli P. 2003. Assembly of endocytosis-associated proteins on liposomes. *Meth. Enzymol.* 372: 248-260.

232. Polo S, Bossi G, Sigismund S, Feretta M, Guidi M, Capuo MR, Bossi G, Chen H, De Camilli P, and Di Fiore PP. 2002. A single motif responsible for ubiquitin recognition and monoubiquitination in endocytic proteins. *Nature*. 416: 451-455.
233. Lee E, Marcucci M, Daniell L, Pypaert M, Weisz OA, Ochoa GC, Farsad K, Wenk MR, and De Camilli P. 2002. Amphiphysin 2 (Bin1) and T-tubule biogenesis in muscle. *Science*. 297: 1193-1196.
234. Di Paolo G, Pellegrini L, Letinic K, Voronov S, Chang S, Wenk MR, and De Camilli P. 2002. Recruitment and regulation of PIP kinase type 1g by the FERM domain of talin. *Nature*. 420: 88-89.
235. Holroyd P, Lang T, Wenzel D, De Camilli P, and Jahn R. 2002. Imaging direct, dynamin-dependent re-capture of fusing secretory granules on plasma membrane lawns from PC12 cells. *Proc. Natl. Acad. Sci. USA*. 99: 16806-16811.
236. Kim WT, ChangS, Daniell L, Cremona O, Di Paolo G, and De Camilli P. 2002. Delayed re-entry of recycling vesicles into the fusion-competent synaptic vesicle pool in synaptosomal 1 knockout mice. *Proc. Natl. Acad. Sci. USA*. 99: 17143-17148.
237. Murthy V, and De Camilli P. 2003. Cell Biology of the presynaptic terminal. *Ann. Rev. Neurosci.* 26: 701-728.
238. Guo J, Wenk MR, Pellegrini L, Onofri F, Benfenati F, and De Camilli P. 2003. Phosphatidylinositol 4-kinase type IIa is responsible for the phosphatidylinositol 4-kinase activity associated with synaptic vesicles. *Proc. Natl. Acad. Sci. USA*. 100: 3995-4000.
239. Di Paolo G, and De Camilli P. 2003. Does clathrin pull the fission trigger? *Proc. Natl. Acad. Sci. USA*. 100: 4981-4983.
240. Farsad K, and De Camilli P. 2003. Mechanisms of membrane deformation. *Curr. Op. Cell Biol.* 15: 372-381.
241. Wenk MR, Lucast L, Di Paolo G, Romanelli AJ, Suchy SF, Nussbaum RL, Cline GW, McMurray W, and De Camilli P. 2003. Phosphoinositide profiling in complex lipid mixtures using electrospray ionization mass spectrometry. *Nat. Biotechnol.* 21: 813-817.
242. Ha SA, Bunch J, Torabinejad J, DeWald DB, Wenk MR, Lucast L, De Camilli P, Newitt RA, Aebersold R, and Nothwehr SF. 2003. The synaptosomal-like protein Inp53/Sjl3 functions with clathrin in a yeast TGN-to-endosome pathway distinct from the GGA protein-dependent pathway. *Mol. Biol. Cell*. 14:1319-1333.
243. Krauss M, Kinuta M, Wenk MR, De Camilli P, Takei K, and Haucke V. 2003. ARF6 stimulates clathrin/ AP-2 recruitment to synaptic membranes by activating phosphatidylinositol phosphate kinase type I γ . *J. Cell Biol.* 162:113-124.
244. Barsukov IL, Prescott A, Bate N, Patel B, Floyd DN, Bhanji N, Bagshaw R, Letinic K, Di Paolo G, De Camilli P, Roberts GC, and Critchley DR. 2003. Phosphatidylinositol phosphate kinase type 1gamma and betal-integrin cytoplasmic domain bind to the same region in the talin FERM domain. *J. Biol. Chem.* 278: 31202-31209.
245. Petzold GC, Marcucci M, Butler MH, van Landeghem FKH, Einhäupl KM, Solimena M, Valdueza JM, and De Camilli P. 2004. Rhabdomyolysis and paraneoplastic stiff-man syndrome amphiphysin autoimmunity. *Ann. Neurol.* 55: 286-290.
246. Stahelin RV, Long F, Peter BJ, Murray D, De Camilli P, McMahon HT, and Wonhwa Cho. 2003. Contrasting membrane interaction mechanisms of AP180 ANTH and Epsin ENTH domains. *J. Biol. Chem.* 278: 28993-28999.
247. Farsad K, Slepnev V, Ochoa G, Daniell L, Hauke V, and De Camilli P. 2003. A putative role for intramolecular regulatory mechanisms in the adaptor function of amphiphysin in endocytosis. *Neuropharmacology*. 45: 261-284.
248. Salazar MA, Kwiatkowski AV, Pellegrini L, Cestra G, Butler MH, Rossman KL, Serna DM, Sondek J, Gertler FB, and De Camilli P. 2003. Tuba: A novel protein

- containing Bin/Amphiphysin/Rvs (BAR) and Dbl homology domains links dynamin to regulation of the actin cytoskeleton. *J. Biol. Chem.* 278: 49031-49043.
- 249. Chen H, Polo S, Di Fiore PP, and De Camilli P. 2003. Rapid Ca²⁺-dependent decrease of protein ubiquitination at synapses. *Proc. Natl. Acad. Sci. USA* 100: 14908-14913.
 - 250. Farsad K, and De Camilli P. 2003. Neurotransmission and the synaptic vesicle cycle. *Yale J. Biol. Med.* 75: 261-284.
 - 251. Lee SY, Wenk MR, Kim Y, Laird AC, and De Camilli P. 2004. Regulation of synaptojanin 1 by cyclin-dependent kinase 5 at synapses. *Proc. Natl. Acad. Sci. USA*. 101: 546-551.
 - 252. Wang MQ, Kim WT, Gao G, Torrey TA, Morse III HC, De Camilli P, and Goff SP. 2003. Endophilins interact with Moloney murine leukemia virus Gag and modulate virion production. *J. Biol.* 3: 4.1-4.17.
 - 253. Wenk MR, and De Camilli P. 2004. Protein-lipid interactions and phosphoinositide metabolism in membrane traffic: insights from vesicle recycling in nerve terminals. *Proc. Natl. Acad. Sci. USA*. 101: 8262-8269.
 - 254. Calderwood DA, Tai V, Di Paolo G, De Camilli P, and Ginsberg MH. 2004. Competition for talin results in trans-dominant inhibition of integrin activation. *J. Biol. Chem.* 279: 28889-28895.
 - 255. Kowanetz K, Husnjak K, Holler D, Kowanetz M, Soubeyran P, Hirsch D, Schmidt MHH, Pavelic K, De Camilli P, Randazzo PA, and Dikic I. 2004. CIN85 associates with multiple effectors controlling intracellular trafficking of EGF receptors. *Mol. Biol. Cell.* 15: 3155-3166.
 - 256. Johenning FW, Wenk MR, Uhlen P, DeGray B, Lee E, De Camilli P, and Ehrlich BE. 2004. InsP₃-mediated intracellular calcium signaling is altered by expression of synaptojanin-1. *Biochem J.* 382: 687-694.
 - 257. Bergsman JB, De Camilli P, and McCormick D. 2004. Multiple large inputs to principal cells in the mouse medial nucleus of the trapezoid body. *J. Neurophysiol.* 92: 545-52.
 - 258. Evergren E, Marcucci M, Tomilin N, Löw Pa, Slepnev V, Andersson F, Gad H, De Camilli P, and Shupliakov O. 2004. Amphiphysin is an integral component of clathrin coats involved in synaptic vesicle recycling at the lamprey giant synapse. *Traffic.* 5: 1-15.
 - 259. Di Paolo G, Moskowitz HS, Gipson K, Wenk MR, Voronov S, Obayashi M, Flavell R, Fitzsimonds RM, Ryan TA, and De Camilli P. 2004. Impaired PI(4,5)P₂ synthesis in nerve terminals produces synaptic vesicle trafficking defects. *Nature*. 431: 415-422.
 - 260. Itoh T, and De Camilli P. 2004. Membrane trafficking: Dual-key strategy. *Nature*. 429: 141-143.
 - 261. Lacas-Gervais S, Guo J, Strenzke N, Scarfone E, Kolpe M, De Camilli P, Moser T, Rasband M, and Solimena M. 2004. Absence of a single β IV spectrin isoform, β IV Σ I alters nodes of Ranvier and causes neuropathies in mice. *J. Cell Biol.* 166: 983-990.
 - 262. Morgan JR, Di Paolo G, Werner H, Schedrina VA, Pypaert M, Pieribone V, and De Camilli P. 2004. A role for talin in presynaptic function. *J. Cell Biol.* 167: 43-50.
 - 263. Van Epps HA, Hayashi M, Lucast L, Stearns GW, Hurley JB, De Camilli P, and Brockerhoff SE. 2004. The zebrafish *nrc* mutant reveals a role for the polyphosphoinositide phosphatase Synaptojanin 1 in cone photoreceptor ribbon anchoring. *J. Neurosci.* 24: 8641-8650.
 - 264. Yoshida Y, Kinuta M, Abe T, Liang S, Araki K, Cremona O, Di Paolo G, Moriyama Y, Yasuda T, De Camilli P, and Takei K. 2004. The stimulatory action of amphiphysin on dynamin function is dependent on lipid bilayer curvature. *EMBO J.* 23: 3483-3491. PMCID: PMC516627

265. Wenk MR, and De Camilli P. 2004. Phosphoinositide profiling in complex lipid mixtures. In *Functional Lipidomics*. Eds., L. Feng & GD Prestwich. (Marcel Dekker, Inc.).
266. Murinson BB, Butler M, Marfurt K, Gleason S, De Camilli P, and Solimena M. 2004. Markedly elevated GAD antibodies in SPS: effects of age and illness duration. *Neurology*. 63: 2146-2148.
267. Cestra G, Toomre D, Chang S, and De Camilli P. 2005. The Abl/Arg substrate ArgBP2/nArgBP2 coordinates the function of multiple regulatory mechanisms converging on the actin cytoskeleton. *Proc. Natl. Acad. Sci. USA*. 102: 1731-1736.
268. Lee SY, Voronov S, Letinic K, Nairn AC, Di Paolo G, and De Camilli P. 2005. Regulation of the interaction between PIPK Ig and talin by proline-directed protein kinases. *J. Cell Biol.* 168: 789-799.
269. Chen H, and De Camilli P. 2005. The association of epsin with ubiquitinated cargo along the endocytic pathway is negatively regulated by its interaction with clathrin. *Proc. Natl. Acad. Sci. USA*. 102: 2766-2771.
270. Schenk U, Menna E, Kim T, Passafaro M, Chang S, De Camilli P, and Matteoli M. 2005. A novel pathway for presynaptic mitogen-activated kinase activation via AMPA receptors. *J. Neurosci.* 25: 1654-1663.
271. Gong LW, Di Paolo G, Diaz E, Lindau M, De Camilli P, and Toomre D. 2005. PIP kinase type Iy regulates dynamics of large dense-core vesicle fusion. *Proc. Natl. Acad. Sci. USA*. 102: 5204-5209.
272. De Camilli P. Molecular mechanisms in membrane traffic at the neuronal synapse: role of protein-lipid interactions. 2005. *Harvey Lect.* (John Wiley and Sons, Inc.). 100: 1-28.
273. Salazar G, Craige B, Wainer BH, Guo J, De Camilli P, and Faundez V. 2005. Phosphatidylinositol-4-kinase type II alpha is a component of AP-3-derived vesicles. *Mol. Biol. Cell*. 16: 3692-3704.
274. Bruzzaniti A, Neff L, Sanjay A, Horne WC, De Camilli P, and Baron R. 2005. Dynamin forms a Src-kinase-sensitive complex with Cbl and regulates podosomes and osteoclast activity. *Mol. Biol. Cell*. 16: 3301-3313.
275. Shin HW, Hayashi M, Christoforidis S, Lacas-Gervais S, Wenk M, Modregger J, Uttenweiler-Joseph S, Wilm M, Nystuen A, Frankel WN, Solimena M, De Camilli P, and Zerial M. 2005. An enzymatic cascade of rab5 effectors regulates phosphoinositide turnover in the endocytic pathway. *J. Cell Biol.* 170: 607-618.
276. Cestra G, Kwiatkowski A, Salazar M, Gertler F, and De Camilli P. 2005. Tuba, a GEF for Cdc42, links dynamin to actin regulatory proteins. *Methods Enzymol.* 404: 537-545.
277. Mao Y, Senic-Matuglia F, Di Fiore PP, Polo S, Hodsdon ME, and De Camilli P. 2005. De-ubiquitinating function of ataxin-3: insights from the solution structure of the Josephin domain. *Proc. Natl. Acad. Sci. USA*. 102: 12700-12705.
278. Itoh T, Erdmann KS, Roux A, Habermann B, Werner H, and De Camilli P. 2005. Dynamin and the actin cytoskeleton cooperatively regulate plasma membrane invagination by BAR and F-BAR proteins. *Dev. Cell*. 6: 791-804.
279. Tosoni D, Puri C, Confalonieri S, Salcini AE, De Camilli P, Tacchetti C, and Di Fiore PP. 2005. TTP specifically regulates the internalization of the transferrin receptor. *Cell*. 123: 875-888.
280. Roux A, Uyhazi K, Frost A, and De Camilli P. 2006. GTP-dependent twisting of dynamin implicates both constriction and tension in membrane fission. *Nature*. 441: 528-531.
281. Di Paolo G, and De Camilli P. 2006. Phosphoinositides in cell regulation and membrane dynamics. *Nature*. 443: 651-657.
282. Itoh T, and De Camilli P. 2006. BAR, F-BAR and ENTH/ANTH domains in the regulation of membrane-cytosol interfaces and membrane curvature. *Biochim. Biophys. Acta*. 1761: 897-912.

283. Perera RM, Zoncu R, Lucast L, De Camilli P, and Toomre D. 2006. Two synaptojanin 1 isoforms are recruited to clathrin coated pits at different stages. *Proc. Natl. Acad. Sci. USA.* 103: 19332-19337.
284. Zoncu R, Perera RM, Sebastian R, Nakatsu F, Chen H, Balla T, Ayala G, Toomre D, and De Camilli P. 2007. Loss of endocytic clathrin coated pits upon acute depletion of phosphatidylinositol 4,5 bisphosphate. *Proc. Natl. Acad. Sci. USA.* 103: 19332-19337.
285. Ferguson SM, Brasnjo G, Hayashi M, Wölfel M, Collesi C, Giovedi S, Raimondi A, Gong LW, Paradise S, O'Toole E, Flavell R, Cremona O, Miesenböck, Ryan TA, and De Camilli P. 2007. A selective activity-dependent requirement for dynamin 1 in synaptic vesicle endocytosis. *Science.* 316: 570-574.
286. Frost A, De Camilli P, and Unger VM. F-BAR proteins join the BAR family fold. 2007. *Structure.* 15: 751-753.
287. Volpicelli-Daley L, and De Camilli P. Phosphoinositides' link to neurodegeneration. 2007. *Nat. Med.* 13: 784-786.
288. Erdmann KS, Mao Y, McCrea H, Lee S, Zoncu R, Paradise S, Modregger J, Biemesderfer D, Toomre D, and De Camilli P. 2007. A role of the Lowe syndrome protein OCRL in early steps of the endocytic pathway. *Dev. Cell.* 13: 377-390.
289. Gil-Henn H, Destaing O, Sims NA, Aoki K, Alles N, Neff L, Sanjay A, Bruzzaniti A, De Camilli P, Baron R, and Schlessinger J. 2007. Defective microtubule-dependent podosome organization in osteoclasts leads to increased bone density in Pyk2-/ Mice. *J. Cell Biol.* 178: 1053-1064.
290. Mani M, Lee SY, Lucast L, Cremona O, Di Paolo G, De Camilli P, and Ryan TA. 2007. The dual phosphatase activity of synaptojanin is required for both efficient synaptic vesicle internalization and re-availability at nerve terminals. *Neuron.* 56: 1004-10018.
291. Destaing O, Sanjay A, Itzstein C, Horne WC, Toomre D, De Camilli P, and Baron R. 2008. The tyrosine kinase activity of c-Src regulates actin dynamic and organization of podosomes in osteoclasts. *Mol. Biol. Cell.* 19: 394-404. PMCID: PMC2174183
292. Hayashi M, Raimondi A, O'Toole E, Paradise S, Collesi C, Cremona O, Ferguson SM, and De Camilli P. 2008. Cell and stimulus dependent heterogeneity of synaptic vesicle endocytic recycling revealed by studies of dynamin 1-null neurons. *Proc. Natl. Acad. Sci. USA.* 105: 2175-2180. PMCID: PMC2538894
293. Frost A, Roux A, Perera R, Spasov K, Destaing O, Egelman EH, De Camilli P, and Unger VM. 2008. Structural basis of membrane invagination by F-Bar domains. *Cell.* 132: 807-817. PMCID: PMC2384079
294. McCrea HJ, Paradise S, Tomasini L, Addis M, Melis MA, De Matteis MA and De Camilli P. 2008. All known patient mutations in the ASH-RhoGAP domains of OCRL affect targeting and APPL1 binding. *Biochem. Biophys. Res. Commun.* 369: 493-499. PMCID: PMC2442618
295. Frost A, Unger VM and De Camilli P. 2008. Boomerangs, Bananas and Blimps: Structure and Function of F-BAR Domains in the Context of the BAR Domain Superfamily. In The Pombe Cdc15 Homology Proteins, Ed., P. Aspenström. (Landes Bioscience).
296. Voronov SV, Frere SG, Giovedi S, Pollina EA, Borel C, Zhang H, Schmidt C, Akeson EC, Wenk MR, Cimasoni L, Arancio O, Antonarakis SE, Davisson MT, Antonarakis SE, Gardiner K, De Camilli P, and Di Paolo G. 2008. Synaptojanin 1-linked phosphoinositide dyshomeostasis and cognitive deficits in mouse models of down syndrome. *Proc. Natl. Acad. Sci. USA.* 105: 9415-9420. PMCID: PMC2453748
297. Krauss M, Jia JY, Roux A, Beck R, Wieland FT, De Camilli P, and Hauke V. 2008. Arf1-GTP-induced tubule formation suggests a function of Arf family

- proteins in curvature acquisition at sites of vesicle budding. *J. Biol. Chem.* 283: 27717-27723. PMCID: PMC3762545
298. Lou X, Paradise S, Ferguson SM, De Camilli P. 2008. Selective saturation of slow endocytosis at a giant glutamatergic central synapse lacking dynamin 1. *Proc. Natl. Acad. Sci. USA.* 105: 17555-17560. PMCID: PMC2579887
299. Gong LW, and De Camilli P. 2008. Regulation of postsynaptic AMPA responses by synaptosomal protein I. *Proc. Natl. Acad. Sci. USA.* 105: 17561-17566. PMCID: PMC2579885
300. Zoncu R, Perera R, Balkin DM, Toomre D, and De Camilli P. 2009. A phosphoinositide switch controls the maturation and signaling properties of APPL endosomes. *Cell.* 136: 1110-1121. PMCID: PMC2705806
301. McCrea HJ, and De Camilli P. 2009. Mutations in phosphoinositide metabolizing enzymes and human disease. *Physiology.* 24: 8-16. PMCID: PMC3499097
302. Mao Y, Yamaga M, Zhu X, Wei Y, Sun HQ, Wang J, Yun M, Wang Y, Di Paolo G, Bennett M, Mellman I, Abrams CS, De Camilli P., Lu CY, and Yin H. 2009. Essential and unique roles of PIP5K- γ and - α in FC γ receptor-mediated phagocytosis. *J. Cell Biol.* 184: 281-296. PMCID: PMC2654300
303. Frost A, Unger VM and De Camilli P. 2009. The BAR domain superfamily: Membrane-molding macro-molecules. *Cell.* 137: 191-196. PMID: 19379681
304. Vasudevan L, Jeromin A, Volpicelli-Daley L, De Camilli P., Holowka D, and Baird B. 2009. The b and g isoforms of type I PIP5kinase regulate distinct stages of Ca $^{2+}$ signaling in mast cells. *J. Cell Sci.* 122: 2567-2574. PMCID: PMC2704887
305. Mao Y, Balkin DM, Zoncu R, Erdmann K, Tomasini L, Hu F, Jin MM, Hodsdon ME, and De Camilli P. 2009. A PH domain within OCRL bridges clathrin mediated membrane trafficking to phosphoinositide metabolism. *EMBO.* 28: 1831-1842. PMCID: PMC2711190
306. Verstreken P, Ohyama T, Haueter C, Habets RLP, Lin YQ, Swan LE, Ly CV, Venken KJT, De Camilli P., and Bellen HJ. 2009. Tweek, an evolutionary conserved protein with no obvious motifs, is required for synaptic vesicle recycling. *Neuron.* 63: 203-215. PMCID: PMC2759194
307. Chen H, Ko G, Zatti A, di Giacomo G, Liu L, Raiter E, Perucco E, Colles C, Min W, Zeiss C, De Camilli P., and Cremona O. 2009. Embryonic arrest at midgestation and disruption of Notch signaling produced by the absence of both epsin 1 and epsin 2 in mice. *Proc. Natl. Acad. Sci. USA.* 106: 13838-13843. PMCID: PMC2728981
308. Yamada H, Padilla-Parra S, Park SJ, Itoh T, Chaineau M, Monaldi I, Cremona O, Benfenati F, De Camilli P., Coppey-Moisan M, Tramier M, Galli T, and Takei K. 2009. Dynamic interaction of amphiphysin with N-WASP regulates actin assembly. *J. Biol. Chem.* 284: 34244-34256. PMCID: PMC2797194
309. Fairn GD, Ogata K, Botelho RJ, Stahl PD, Anderson RA, De Camilli P., Meyer T, Wodak S, and Grinstein S. 2009. An electrostatic switch displaces phosphatidylinositol phosphate kinases from the membrane during phagocytosis. *J. Cell. Biol.* 187: 701-714. PMCID: PMC2806594
310. Ferguson SM, Raimondi A, Paradise S, Shen H, Mesaki K, Destaing O, Ko G, Cremona O, O'Toole E, and De Camilli P. 2009. Coordinated actions of actin and BAR proteins upstream of dynamin at endocytic clathrin-coated pits. *Dev. Cell.* 17: 811-822. PMCID: PMC2861561
311. Swan LE, Tomasini L, Pirruccello M, Lunardi J, and De Camilli P. 2010. Two closely related endocytic proteins that share a common OCRL binding motif with APPL1. *Proc. Natl. Acad. Sci. USA.* 107: 3511-1516. PMCID: PMC2840126
312. Yim YI, Sun T, Wu LG, Raimondi A, De Camilli P., Eisenberg E, and Greene LE. 2010. Endocytosis and clathrin uncoating defects at synapses of auxilin knockout mice. *Proc. Natl. Acad. Sci. USA.* 107: 4412-4417. PMCID: PMC2840126

313. Nakatsu F, Perera RM, Lucast L, Zoncu R, Domin J, Gertler F, Toomre D, and De Camilli P. 2010. The inositol 5-phosphatase SHIP2 regulates endocytic clathrin-coated pit dynamics. *J. Cell Biol.* 190:307-315. PMCID: PMC2922640
314. Volpicelli-Daley LA, Lucast L, Gong LW, Sasaki J, Sasaki T, Abrams CS, Kanaho Y, and De Camilli P. 2010. Phosphatidylinositol 4-phosphatase 5-kinases and phosphatidylinositol 4,5-bisphosphate synthesis in the brain. *J. Biol. Chem.* 285: 28708-28714. PMCID: PMC2937898
315. Wu M, Huang B, Graham M, Raimondi A, Heuser JE, Zhuang X, and De Camilli P. 2010. Coupling between clathrin-dependent endocytic budding and F-BAR-dependent tubulation in a cell-free system. *Nat. Cell Biol.* 9: 902-908. PMCID: PMC3338250
316. Liang L, Shen H, De Camilli P., and Duncan JS. 2010. Tracking clathrin coated pits with a multiple hypothesis based method. *Med. Image Comput. Comput. Assist. Interv.* 13: 315-322. PMCID: PMC3889144
317. Ko V, Paradise S, Chen H, Graham M, Vecchi M, Bianchi F, Cremona O, Di Fiore PP, and De Camilli P. 2010. Selective high level expression of epsin 3 in gastric parietal cells where it is localized at endocytic sites of apical canaliculi. *Proc. Natl. Acad. Sci. USA.* 107: 21511-21516. PMCID: PMC3003030
318. Raimondi A, Ferguson SM, Lou X, Armbruster M, Paradise S, Giovedi S, Messa M, Kono N, Takashi J, Cappello V, O'Toole E, Ryan TA, and De Camilli P. 2011. Overlapping role of dynamin isoforms in synaptic vesicle endocytosis. *Neuron.* 70: 1100-1114. PMCID: PMC3190241
319. Shen H, Ferguson SM, Dephoure N, Park R, Volpicelli-Daley L, Gygi S, Schlessinger J, and De Camilli P. 2011. Constitutive Ack phosphorylation at arrested endocytic clathrin coated pits of cells that lack dynamin. *Molec. Biol. Cell.* 22: 493-502. PMCID: PMC3038647
320. Pirruccello M, Swan LE, Folta-Stogniew E, and De Camilli P. 2011. Recognition of the F&H motif by the Lowe syndrome protein OCRL. *Nature Struct. Mol. Biol.* 18: 789-795. PMCID: PMC3130824
321. Milosevic I, Giovedi S, Lou X, Raimondi A, Collesi C, Paradise S, Shen H, O'Toole E, Ferguson SM, Cremona O, and De Camilli P. 2011. Recruitment of endophilin to clathrin coated pit necks is required for uncoating but is dispensable for fission. *Neuron.* 72: 587-601. PMCID: PMC3258500
322. Wu M, and De Camilli P. 2012. Supported native plasma membranes as platforms for the reconstitution and visualization of endocytic membrane budding. *Methods Cell Biol.* 108: 3-16. PMID: 22325595
323. Liang L, Shen H, De Camilli P., Toomre DK, Duncan JS. 2011. An expectation maximization based method for subcellular particle tracking using multi-angle TIRF microscopy. *Med. Image Comput. Assist. Interv.* 14: 629-636. PMCID: PMC3648983
324. Bohdanowicz M, Balkin DM, De Camilli P., and Grinstein S. 2011. Recruitment of OCRL and Inpp5B to phagosomes by Rab5 and APPL1 depletes phosphoinositides and attenuates Akt signaling. *Mol. Biol. Cell.* 23: 176-187. PMCID: PMC3248896
325. Ferguson SM, and De Camilli P. 2012. Dynamin, a membrane-remodelling GTPase. *Nat. Rev. Mol. Cell Biol.* 13: 75-88. PMCID: PMC3519936
326. Lou X, Fan F, Messa M, Raimondi A, Wu Y, Looger L, Ferguson SM, and De Camilli P. 2012. Reduced release probability prevents vesicle depletion and transmission failure at dynamin mutant synapses. *Proc. Natl. Acad. Sci. USA.* 109: 515-523. PMCID: PMC3286982
327. Sousa L, Lax I, Shen H, Ferguson SM, De Camilli P., and Schlessinger J. 2012. Suppression of EGFR endocytosis by dynamin depletion reveals that EGFR signaling occurs primarily at the plasma membrane. *Proc. Natl. Acad. Sci. USA.* 109: 4419-4424. PMCID: PMC3311323
328. Pirruccello M, and De Camilli P. 2012. Inositol 5-phosphatases: insights from the

- Lowe syndrome protein OCRL. *Trends. Biochem. Sci.* 37:134-143. PMCID: PMC3323734
329. Sarantis H, Balkin DM, De Camilli P, Isberg RR, Brumell JH and Grinstein S. 2012. Yersinia entry into host cells requires Rab5-dependent dephosphorylation of PI(4,5)P₂ and membrane scission. *Cell Host Microbe.* 11: 117-128. PMCID: PMC4489550
330. Saheki Y, and De Camilli P. 2012. Synaptic vesicle endocytosis. In *The Synapse*. Eds., M. Sheng, B. Sabatini & T.C. Südhof. *Cold Spring Harb. Perspect Biol.* pp 79-108. PMID: 22763746
331. Idevall-Hagren O, Dickson EJ, Hille B, Toomre DK, and De Camilli P. 2012. Optogenetic control of phosphoinositide metabolism. *Proc. Natl. Acad. Sci. USA.* 109: 2316-2323. PMCID: PMC3435206
332. Rodriguez L, Simeonato E, Scimeni P, Anselmi F, Cali B, Crispino G, Ciubotaru CB, Bortolozzi M, Ramiro FG, Majumder P, Arslan E, De Camilli P., Pozzan T, and Mammano F. 2012. Reduced phosphatidylinositol 4,5-bisphosphate synthesis impairs inner ear Ca²⁺ signaling and high frequency hearing acquisition. *Proc. Natl. Acad. Sci. USA.* 109: 14013-14018. PMCID: PMC3435166
333. Shen H, Pirruccello M and De Camilli P. 2012. SnapShot: Membrane Curvature Sensors and Generators. *Cell.* 150: 1300. PMCID: PMC3819217
334. Pasula S, Cai X, Dong Y, Messa M, McManus J, Chang B, Liu X, Zhu H, Mansat RS, Yoon, SJ, Hahn S, Keeling J, Saunders D, Ko G, Knight J, Newton G, Luscinskas F, Sun X, Towner R, Lupu F, Xia L, Cremona O, De Camilli P., Min W, and Chen H. 2012. Endothelial Epsin deficiency decreases tumor growth by enhancing VEGF Signaling. *J. Clin. Invest.* 122: 4424-4438. PMCID: PMC3533553
335. Soda K, Balkin DM, Ferguson SM, Paradise S, Milosevic I, Giovedi S, Volpicelli-Daley L, Tian X, Wu Y, Ma H, Son SH, Zheng R, Moeckel G, Cremona O, Holzman LB, De Camilli P., and Ishibe S. 2012. Role of dynamin, synaptjanin and endophilin in podocyte foot processes. *J. Clin. Invest.* 122: 4401-4411. PMCID: PMC3533561
336. Nakatsu F, Baskin JM, Chung J, Tanner LB, Shui G, Lee SY, Pirruccello M, Hao M, Ingolia NT, Wenk MR, and De Camilli P. 2012. PtdIns4P synthesis at the plasma membrane and its impact on PtdIns(4,5)P₂ dynamics to control plasma membrane identity. *J. Cell Biol.* 199: 1003-1016. PMCID: PMC3518224
337. Wu M, Wu X, and De Camilli P. 2013. Calcium oscillations-coupled conversion of actin travelling waves to standing oscillations. *Proc. Natl. Acad. Sci. USA.* 4: 1339-1344. PMCID: PMC3557052
338. Zhu T, Chappel JC, Hsu FF, Turk J, Aurora R, Hyrc K, De Camilli P., Broekelmann TJ, Mecham RP, Teitelbaum SL, and Zhou W. 2013. Type I phosphatidylinositol-4 phosphate 5 kinase γ regulates osteoclasts in a bifunctional manner. *J. Cell Biol.* 288: 5268-5277. PMCID: PMC3581369
339. Giordano F, Saheki Y, Idevall-Hagren O, Colombo S, Pirruccello M, Milosevic I, Gracheva E, Bagriantsev SN, Borgese N and De Camilli P. 2013. PI(4,5)P₂-dependent and Ca²⁺-regulated ER-PM interactions mediated by the extended-synaptotagmins. *Cell.* 153: 1494-1509. PMCID: PMC3716012
340. Krebs CE, Karkheiran S, Powell JC, Cao M, Makarov V, Darvish H, Di Paolo G, Walker RH, Shahidi GA, Buxbaum JD, De Camilli P., Yue Z, and Paisan-Ruiz C. 2013. The Sac1 domain of *SYNJ1* identified mutated in a family with early-onset progressive Parkinsonism with generalized seizures. *Hum. Mutat.* 34: 1200-1207. PMCID: PMC3790461
- 341 Cai X, Xu Y, Cheung AK, Tomlinson RC, Alcazar-Roman A, Murphy L, Billich A, Zhang B, Feng Y, Klumpp M, Rondeau JM, Fazal AN, Wilson CJ, Myer V, Joberty G, Bouwmeester T, Babow MA, Finan PM, Porter JA, Ploegh HL, Baird D, De Camilli P., Tallarico JA, and Huang Q. 2013. PIKfyve, a Class III PI kinase, is the

- target of the small molecular IL-12/IL-23 inhibitor apilimod and a player in toll-like receptor signaling. *Chem. Biol.* 20: 912-921.
- 342. Armbruster M, Messa M, Ferguson SM, De Camilli P, and Ryan TA. 2013. Dynamin phosphorylation controls optimization of endocytosis for brief action potential bursts. *eLife*. e00845. PMCID: PMC3728620
 - 343. Devereaux K, Dall'Armi C, Alcazar-Roman A, Ogasawara Y, Zhou X, Wang F, Yamamoto A, De Camilli P, and Di Paolo G. 2013. Regulation of mammalian autophagy by Class II and III Pi 3-kinases through PI3P synthesis. *PLOS ONE*. 8: e76405. PMCID: PMC3789715
 - 344. Park R, Shen H, Liu L, Liu X, Ferguson SM, and De Camilli P. 2013. Dynamin triple knockout cells reveal off target effects of a commonly used dynamin inhibitor. *J. Cell Sci.* 126: 5305-5312. PMCID: PMC3828596
 - 345. Destaing O, Ferguson SM, Grichine A, Oddou C, De Camilli P, Albiges-Rizo C, and Baron R. 2013. Essential function of dynamin in the invasive properties and actin architecture of v-SRC induced podosomes/invadosomes. *PLOS ONE*. 10: e77956. PMCID: PMC3857171
 - 346. Wu X, Chi RJ, Baskin JM, Lucast L, Burd CG, De Camilli P, and Reinisch KM. 2014. Structural insights into assembly and regulation of the plasma membrane phosphatidylinositol 4-kinase complex. *Dev. Cell.* 28: 19-29. PMCID: PMC3857171
 - 347. Willinger T, Ferguson SM, Pereira JP, De Camilli P, and Flavell RA. 2014. Dynamin 2-dependent endocytosis is required for sustained S1PR1 signaling and T lymphocyte egress. *J. Exptl. Med.* 211: 685-700. PMCID: PMC3978280
 - 348. Idevall-Hagren O, and De Camilli P. 2013. Manipulation of plasma membrane phosphoinositides using photoinduced protein-protein interactions. In Methods in Mol. Biol. Ed., S. Cambridge. (*Humana Press*), pp109-148.
 - 349. Lee M, Skoura A, Park EJ, Landskroner-Eiger S, Jozsef L, Luciano A, Murata T, Pasula S, Dong Y, Bouaouina M, Calderwood D, Ferguson SM, De Camilli P, and Sessa WC. 2014. Dynamin-2 regulation of integrin endocytosis, but not VEGF signaling, is critical for developmental angiogenesis. *Development*. 141: 1465-1472. PMCID: PMC3957370
 - 350. Demmel L, Schmidt K, Lucast L, Havlicek K, Zankel A, Koestler T, Reithofer V, De Camilli P, and Warren G. 2014. The endocytic activity of the flagellar pocket in *Trypanosoma brucei* is regulated by an adjacent phosphatidylinositol phosphate kinase. *J. Cell Sci.* 127: 2351-2364. PMCID: PMC4021478
 - 351. Pirruccello M, Nandez R, Idevall-Hagren O, Alcazar-Roman A, Abriola A, Berwick SA, Lucast L, Morel D, and De Camilli P. 2014. Identification of inhibitors of inositol 5-phosphatases through multiple screening strategies. *ACS Chem. Biol.* 9: 1359-1368. PMCID: PMC4076014
 - 352. Liang L, Shen H, De Camilli P, and Duncan JS. 2014. A novel multiple hypothesis based particle tracking method for clathrin mediated endocytosis analysis using fluorescence microscopy. *Inf. Process Med. Imaging*. 23: 1844-1857. PMCID: PMC4373089
 - 353. Schauder CM, Wu X, Saheki Y, Narayanaswamy P, Torta F, Wenk MR, De Camilli P*, and Reinisch KM*. 2014. Structure of a lipid-bound Extended-Synaptotagmin indicates a role in lipid transfer. *Nature*. 510: 552-555. PMCID: PMC4135724
 - 354. Gupta AR, Pirruccello M, Cheng F, Kang HJ, Fernandez TV, Baskin JM, Choi M, Liu L, Ercan-Sencalek AG, Murdoch JD, Klei L, Neale BM, Daley MJ, Lifton RP, De Camilli P, Zhao HY, Sestan N, and State MW. 2014. Rare deleterious mutations of the gene EFR3A in autism spectrum disorders. *Mol. Autism*. 5: 31. PMCID: PMC4032628
 - 355. Shen H, Giordano F, Wu Y, Chan J, Zhu C, Milosevic I, Wu X, Yao K, Chen B, Baumgart T, Sieburth D, De Camilli P. 2014. Coupling between endocytosis and

- sphingosine kinase 1 recruitment. *Nat. Cell Biol.* 16: 652-662. PMCID: PMC3557052
356. Wu Y, O'Toole ET, Girard M, Ritter B, Messa M, Liu X, McPherson P, Ferguson SM, De Camilli P. 2014. A dynamin 1-, dynamin 3- and clathrin-independent pathway of synaptic vesicle recycling mediated by bulk endocytosis. *Elife*. 3: e01621. PMCID: PMC4107917
357. Hubber A, Arasaki K, Nakatsu F, Hardiman C, Lambright D, De Camilli P, Nagai H, and Roy CR. 2014. The machinery at endoplasmic reticulum-plasma membrane contact sites contributes to spatial regulation of multiple Legionella effector proteins. *PLoS Pathog.* 7: e1004222. PMCID: PMC4081824
358. Nandez R, Balkin DM, Messa M, Paradise S, Czapla H, Hein MY, Mann M, and De Camilli P. 2014. A role of OCRL in clathrin-coated pit fission and uncoating revealed by studies of Lowe syndrome cells. *Elife*. 3:e02975. PMCID: PMC4358339
359. Messa M, Fernandez-Busnadio R, Sun EW, Chen H, Czapla H, Wrassman K, Wu Y, Ko G, Ross T, Wendland B, and De Camilli P. 2014. Epsin deficiency impairs endocytosis by stalling the actin-dependent invagination of endocytic clathrin coated pits. *Elife*. 3: e03311. PMCID: PMC4161027
360. Shin NY, Choi H, Neff L, Wu Y, Saito H, Ferguson SM, De Camilli P, and Baron R. 2014. Dynamin and endocytosis are required for the fusion of osteoclasts and myoblasts. *J. Cell Biol.* 207: 73-89. PMCID: PMC4195819
361. Frohlich F, Christiano R, Alcazar-Roman A, De Camilli P, and Walther TC. 2014. Eisosomes function in maintaining plasma membrane phosphoinositide levels. *Mol. Biol. Cell.* 25: 2797-806. PMCID: PMC4161514
362. Cao M, Milosevic I, Giovedi S, and De Camilli P. 2014. Up-regulation of Parkin in endophilin mutant mice. *J. Neurosci.* 34: 16544-16549. PMCID: PMC4252559
363. Idevall-Hagren O, and De Camilli P. 2015. Detection and manipulation of phosphoinositides. *Biochim. Biophys. Acta*. 1851: 736-745.
364. Chung J, Nakatsu F, Baskin JM, De Camilli P. 2015. Plasticity of PI4KIII α interactions at the plasma membrane. *EMBO Rep.* 6: 312-320. PMCID: PMC4364870
365. Willinger T, Staron MM, Ferguson SM, De Camilli P, and Flavell RA. 2015. Dynamin 2-dependent endocytosis sustains T cell receptor signaling and drives metabolic reprogramming in T lymphocytes. *Proc. Natl. Acad. Sci.* 112: 4423-4428. PMCID: PMC4394306
366. Fernández-Busnadio R, Saheki Y, and De Camilli P. 2015. Three dimensional architecture of extended synaptotagmin-mediated endoplasmic reticulum-plasma membrane contact sites. *Proc. Natl. Acad. Sci.* 112: 2004-2013. PMCID: PMC4413308
367. Nakatsu F, Messa M, Nandez R, Czapla H, Zou Y, Strittmatter SM, and De Camilli P. 2015. Sac2/INPP5F is an inositol 4-phosphatase that functions in the endocytic pathway. *J. Cell Biol.* 209: 85-95. PMCID: PMC4395491
368. Gowrishankar S, Yuan P, Wu Y, Schrag M, Paradise S, Grutzendler J, De Camilli P, and Ferguson SM. 2015. Massive accumulation of luminal protease-deficient axonal lysosomes at Alzheimer's disease amyloid plaques. *Proc. Natl. Acad. Sci. USA*. 112: 3699-3708. PMCID: PMC4507205
369. Huttlin EL, Ting L, Bruckner RJ, Gebreab F, Gygi MP, Szpyt J, Tam S, Zarraga G, Colby G, Baltier K, Dong R, Guarani V, Vaites LP, Ordureau A, Rad R, Erickson BK, Wühr M, Chick J, Zhai B, Kolippakkam D, Mintseris J, Obar RA, Harris T, Artavanis-Tsakonas, Sowa ME, De Camilli P, Paulo JA, Harper JW, and Gygil SP. 2015. The BioPlex network: a systematic exploration of the human interactome. *Cell*. 162: 425-440. PMCID: PMC4617211

370. Idevall-Hagren O*, Lu A, Xie B, and De Camilli P*. 2015 Triggered Ca²⁺ influx is required for extended-synaptotagmin 1-induced ER-plasma membrane tethering. *EMBO J.* 1851: 736-745. PMCID: PMC4585464
371. Chung J, Torta F, Masai K, Lucast L, Czapla H, Tanner LB, Narayanaswamy P, Wenk MR, Nakatsu F*, and De Camilli P*. 2015. PI4P/phosphatidylserine countertransport at ORP5 and ORP8-mediated ER-plasma membrane contacts. *Science.* 349: 428-432. (*News and Views in Nature: Menon and Levine, Nature* 525, 191-192, 2015). PMCID: PMC4638224
372. Baskin JM, Wu X, Christiano R, Oh M, Schauder CM, Gazzero E, Messa M, Baldassari S, Asereto S, Biancheri R, Zara F, Minetti C, Raimondi A, Simons M, Walther TC, Reinisch KM*, and De Camilli P*. 2015. The leukodystrophy protein FAM126A/Hyccin regulates PI4P synthesis at the plasma membrane. *Nat. Cell Biol.* 18: 132-138. PMCID: PMC4689616
373. Reinisch KM and De Camilli P. 2015. SMP domains proteins at membrane contact sites: structure and function. *Biochim Biophys Acta.* [Epub ahead of print].
374. Saheki Y, Bian X, Schauder CM, Sawaki Y, Surma MA, Klose C, Pincet F Reinisch KM, and De Camilli P. 2016. Control of plasma membrane lipid homeostasis by the extended synaptotagmins. *Nat. Cell Biol.* In Press