

David W. Scharp, MD

Curriculum Vitae
Prodo Laboratories, Inc
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March 1, 2018**Education & Training**

<u>Institution</u>	<u>Degree</u>	<u>Years</u>	<u>Course of Study</u>
University of Missouri, Columbia, MO	-	1963-1966	Chemistry/Biology
Washington University School of Medicine St. Louis, MO	MD	1966-1970	Medicine
Barnes Hospital Surgery Training St. Louis, MO	-	1970-1972	General Surgery
WUSM Post-Doctoral Training Paul Lacy, MD, PhD, St. Louis, MO	-	1972-1974	Diabetes Research
Barnes Hospital Surgery Training St. Louis, MO	-	1974-1976	General Surgery

Certifications – American Board of Surgery 1979, 1989 General Surgery

Academic Appointments

1976	Assistant Professor of Surgery	WUSM and Barnes Hospital	St. Louis, MO
1983	Associate Professor of Surgery	WUSM and Barnes Hospital	St. Louis, MO
1991-1994	Professor of Surgery	WUSM and Barnes Hospital	St. Louis, MO
2012-2015	Lecturer Global Entrepreneurs	UCI Dept International Studies	Irvine, CA

Corporate Appointments

1989-1993	Founding Scientific Advisory Board, Cytotherapeutics, Providence, RI		
1989-1993	Founding Scientist with associated research, Cytotherapeutics, Providence, RI		
1994-1999	Executive VP, Chief Scientific Officer, Chief Medical Officer, Neocrin Co Irvine, CA		
1999-2004	Executive VP, Chief Scientific Officer, Chief Medical Officer, Novocell Inc Irvine, CA		
2004-2006	Executive VP, CMO, new Novocell post-merger with Cythera, Irvine, CA		
2006-present	Founder, CEO, President, CSO – Prodo Laboratories, Aliso Viejo, CA		
2006-present	Founder, CEO, President – The Scharp-Lacy Research Institute, Aliso Viejo, CA		
2010-present	Founder, CEO – Scharp Technologies, Aliso Viejo, CA		
2017-present	Founder, CEO – Progeneron, Aliso Viejo, CA		

Current Active Companies

Prodo Laboratories, Inc – Global Distribution of Human Islets for Research
The Scharp-Lacy Research Institute – Provides Human Islets through IIDP Program
Scharp Technologies – Human Bone Marrow Mesenchymal Stem Cell Research and Production of MDFc19 Conditioned Media for Skin Health Products
Progeneron – Developing Several Natural Products for Differing Medical Conditions

Corporate Relationships

1982-1986 – Contractual Research “Electrophoretic Separation of Pancreatic Cells in Space”, McDonnell Douglas Corp, St. Louis, MO
1983 – STS 8 Challenger Space Shuttle flight for electrophoretic separation of pancreatic islet and acinar cells for zero gravity experiment with published results, McDonnell Douglas Corp
1986-1994 – National Surgical Advisor, Digestive Disease Center of Excellence, Humana Corp
1989-1993 – Contractual Research for Cytotherapeutics – Encapsulated Islet Transplants
1993 – FDA approved Investigator IND clinical trial for encapsulated human islets implanted into non-diabetic, Type 1 diabetic, and Type 2 diabetic recipients for Cytotherapeutics.
2005 – Contractual FDA approved Phase I/II clinical trial of encapsulated islet implants into the subcutaneous site of patients with Type 1 diabetes for Novocell, Irvine, CA
2007-2012 - Consultant – Beta O₂, Tel Aviv, Israel
2008-2009 – Scientific Advisory Board – Micro-Islet, San Diego, CA
2008-2011 – Scientific Advisory Board – Pan-Medics, Costa Mesa, CA
2011-2015 – Consultant - Betalogics, Inc, Division of Johnson & Johnson, Chicago, IL
2012-2014 – Consultant – Didimi, Inc, San Francisco, CA
2013-present – Senior Advisor to International Pancreas & Islet Transplantation Association
2013-present – Advisor to Juvenile Diabetes Research Foundation for islet encapsulation

Honors & Awards

1962-1963 – President of the State of Illinois High School Student Council, Eureka, IL
1967-1970 – President of Medical School Class of 1970, Washington University School of Medicine, St. Louis, MO
1977-1982 – Recipient of NIH Research Career Development Award, Department of Surgery, Washington University School of Medicine, St. Louis, MO
1982-1994 – Continuous NIH research funding through series of grant applications, WUMS
1980-1995 – Site Visit Team Member, NIDDK of the NIH for grant acceptance review
1982 – Elected as Fellow of the American College of Surgery
1985-1989 – Member of NIH Surgery, Anesthesiology, Trauma (SAT) Study Section, Grant Review
1987 – Elected as Member of College of Transplant Surgeons
1988 – Elected Faculty Member of Alpha Omega Alpha, WUMS Chapter, St. Louis, MO
1990 – Federal Employee of the Year Award, Head of Surgery Department, St. Louis Veterans Hospital, St. Louis, MO
1990 – The Huddinge Hospital Transplant Lectureship, Annual Meeting of the Swedish Society for Medical Science, Stockholm, Sweden.
1992-1994 – Member, Juvenile Diabetes Research Foundation, Grant Reviewer
1992 – Council Member – Cell Transplant Society
1993 – Founding Council Member – International Pancreas and Islet Transplantation Association
1994 – Elected to Membership of American Surgical Society
2010 – Awarded Grant for Human Islets for Research and Distribution by National Institutes of Health and the Internal Revenue Service Qualifying Therapeutic Discovery Grant
2010 – Awarded grant for Human Islet Expansion by National Institutes of Health and the Internal Revenue Service Qualifying Therapeutic Discovery Grant
2011 – Awarded Grant for Novel Thermal Reversible Polymer (TRG) for Human Islet Encapsulation and Implantation by National Institutes of Health Phase 1 Grant

Google Scholar Citations March 1, 2018

Total Citations – 9,147 h-index – 44 i10-index - 103

14 Patents with 7 Cited – 599 citations = 50.0% of published patents cited

Most Cited Patent – 266 citations - USPTO #6,083,523

194 Articles & Reviews (includes 8 abstracts) – 8,548 citations

Most Cited Article – 1,327 citations - Ref #70

Number of Articles – 166 with 124 cited = 74.7% of published articles cited

Number of Chapters and Reviews – 27 with 7 cited = 25.9%

Abstracts Not Included, except as noted

Patents – Issued & Expired**Year Citations Number**

1989 – [52] - USPTO #4,868,121 “Islet Isolation Process” **Scharp, DW**, Lacy, PE, Finke, EH, Poteat, J.

1992 – [78] - USPTO #5,079,160 (1992) “Method to Isolate Clusters of Cell Sub-Types from Organs” Lacy, PE, **Scharp, DW**, Ricordi, C.

1994 - [31] - USPTO #5,322,790 (1994) “Islet Isolation Process” **Scharp, D.W.**, Lacy, P.E., Finke, EH, Poteat, TJ.

1999 – [15] - USPTO #5,916,554 “Use of Pouch for Implantation of Living Cells” Dionne, KE, **Scharp, DW**.

2001 – [00] - USPTO #6,322,804 “Implantable biocompatible immunoisulatory vehicle for the delivery of selected therapeutic products” Dionne, K, Emerich, D, Hoffman, D, Sanberg, P, Christenson, L, Hegre, O, **Scharp, D**, Lacy, P, Aebischer, P, Vasconcello, A, Lysaght, M, Gentile, F.

2005 – [00] - USPTO #6,960,351 “Implantable biocompatible immunoisulatory vehicle for delivery of selected therapeutic products” Dionne, K, Emerich, D, Hoffman, D, Sanberg, P, Christenson, L, Hegre, O, **Scharp, D**, Lacy, P, Aebischer, P, Vasconcello, A, Lysaght, M, Gentile, F.

2008 – [59] - USPTO #7,427,415 “Implantation of Encapsulated Biological Materials for Treating Diseases” **Scharp, DW**, Latta, P, Yue, C, Yu, X, Hubbell, J. (abandoned by ViacYTE on 9/23/12)

Patents – Issued**Year Citations Number**

1998 – [00] - USPTO #5,798,113 “Implantable Biocompatible Immunoisulatory Vehicle for Delivery of Selected Therapeutic Products” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR, Christenson, L, Hegre, OD, **Scharp, DW**, Lacy, PE, Aebischer, P, Vasconcellos, AV, Lysaght, MJ, Gentile, FT.

1998 – [00] - USPTO #5,800,828 “Implantable Biocompatible Immunoisulatory Vehicle for Delivery of Selected Therapeutic Products” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR, Christenson, L, Hegre, OD, **Scharp, DW**, Lacy, PE, Aebischer, P, Vasconcellos, AV, Lysaght, MJ, Gentile, FT.

1998 – [00] - USPTO #5,800,829 “Methods for Coextruding Immunoisulatory Implantable Vehicles with a Biocompatible Jacket and a Biocompatible Matrix Core” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR, Christenson, L, Hegre, OD, **Scharp, DW**, Aebischer, P, Vasconcellos, AV, Lysaght, MJ, Gentile, FT.

1999 – [00] - USPTO #5,869,077 “Methods for Treating Diabetes by Delivering Insulin from Biocompatible Cell Containing Devices” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR,

Christenson, L, Hegre, OD, **Scharp, DW**, Lacy, PE, Aeblscher, P., Vasconcellas, AV, Lysaght, MJ, Gentile, FT.
 1999 – [82] - USPTO #5,871,767 “Methods for Treatment or Prevention of Neurodegenerative Conditions Using Immunoisulatory Implantable Vehicles with a Biocompatible Jacket and a Biocompatible Matrix Core” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR, Christenson, L, Hegre, OD, **Scharp, DW**, Lacy, PE, Aeblscher, P, Vasconcellos, AV, Lysaght, MJ, Gentile, FT.
 1999 – [00] - USPTO #5,874,099 “Methods for Making Immunoisulatory Implantable Vehicles with a Biocompatible Jacket and a Biocompatible Matrix Core” Dionne, KE, Emerich, DF, Hoffman, D, Sanberg, PR, Christenson, L, Hegre, OD, **Scharp, DW**, Lacy, PE, Aebischer, P, Vasconcdellos, AV, Lysacht, MJ, Gentile, FT.
 2000 – [266] - USPTO #6,083,523 “Implantable biocompatible immunoisulatory vehicle for the delivery of selected therapeutic products” Dionne, K, Emerich, D, Hoffman, D, Sanberg, P, Christenson, L, Hegre, O, **Scharp, D**, Lacy, P, Aebischer, P, Vasconcello, A, Lysaght, M, Gentile, F.
 2018 – [00] – USPTO #9,858,664 “System, Processes, Methods and Machines for Transforming Image Data into Sizing and Volume Measurements for Tissue” – Roy McCord, Licensed to Prodo Laboratories, Inc.

Patents – Submitted

USPTO Citations Number

USPTO – [00] - #61/949,147 "Novel Enhanced Coating for Cells, Reagents and Methods," **David W. Scharp, MD** and Alexander Gorkovenko, March 6, 2014 – **recently allowed** with patent number and dates to follow.
 USPTO – [00] - #15/446729 “Encapsulation Methods and Compositions” **Scharp, David**, McCord, Roy, March 1, 2017, **To Be Allowed**, Awaiting Final Paper Work.
 USPTO – [00] – PCT/US2017, 020207/WO/2017/151773, “Encapsulation Methods and Compositions” Prodo Laboratories, **Scharp, DW.**, 1/03/2016 – US62/302,167.
 USPTO – [00] - #15/844,642 “Systems, Processes, Methods, and Machines for Transforming Data into Sizing and Volume Measurements for Tissues McCord, Roy (Assigned to Prodo Laboratories, Inc.)

Published Articles

Year – # Citations – Paper

1970's	1. Merrick, A.W., Scharp, D.W. - Electroencephalography of resting behavior in cattle, with observations on the question of sleep, Am. J. Vet. Res., 32:1893-1897, 1971
27	2. Knight, M.J., Scharp, D.W., Kemp, C.B., Ballinger, W.F., Lacy, P.E. - Effects of cold storage on the function of isolated pancreatic islets, Cryobiology, 10:89-90, 1973
25	3. Kemp, C.B., Scharp, D.W., Knight, M.J., Ballinger, W.F., Lacy, P.E. - Importance of implantation site of pancreatic islet isografts in treatment of experimental diabetes, Surgical Forum 24:297-299, 1973
188	4. Kemp, C.B., Knight, M.J., Scharp, D.W., Lacy, P.E., Ballinger, W.F. - Transplantation of isolated pancreatic islets into the portal vein of diabetic rats, Nature 244:447, 1973
268	

5. Scharp, D.W., Kemp, C.B., Knight, M.J., Ballinger, W.F., Lacy, P.E. - The use of Ficoll in the preparation of viable islets of Langerhans from the rat pancreas, *Transplantation* 16:686-689, 1973
- 357 6. Kemp, C.B., Knight, M.J., Scharp, D.W., Ballinger, W.F., Lacy, P.E. - Effect of transplantation site on the results of pancreatic islet isografts in diabetic rats, *Diabetologia* 9:489-491, 1973
- 13 7. DW Scharp, CB Kemp, MJ Knight, JJ Murphy, WT Newton, WF Ballinger, ... Long-term results of portal vein islet isografts and allografts in treatment of streptozotocin-induced diabetes, *Diabetes* 23, 359-359, 1974.
8. MJ Knight, DW Scharp, CB Kemp, SB Nunnally, Ballinger WF, PE Lacy, Cryopreservation of pancreatic islets. *European Surgical Research*, 6, 89-89, 1974.
- 127 9. Scharp, D.W., Murphy, J.J., Newton, W.T., Ballinger, W.F., Lacy, P.E. - Transplantation of islets of Langerhans in diabetic Rhesus monkeys, *Surgery* 77:100-105, 1975
10. Scharp, D.W., Murphy, J.J., Newton, W.T., Ballinger, W.F., Lacy, P.E. - Application of an improved isolation technique for islet transplantation in primates and rats, *Transplant. Proc.* 6(1):739-741, 1975
- 55 11. Feldman, S., Hirshberg, G., Dodi, G., Raizman, M., Scharp, D., Ballinger, W., Lacy, P.E. - Intrasplenic islet isografts, *Surgery* 82:386-394, 1977
- 11 12. Karl, R.C., Scharp, D.W., Ballinger, W.F., Lacy, P.E. - Transplantation of insulin-secreting tissues, *J British Society Gastroenterology - GUT* 18:1062-1072, 1977
- 154 13. Griffith, R.C., Scharp, D.W., Hartman, B.K., Ballinger, W.F., Lacy, P.E. - A morphologic study of intrahepatic portal vein islet isografts, *Diabetes* 26:201-214, 1977
- 16 14. Feldman, S., Scharp, D., Hirshberg, G., Dodi, G., Ballinger, W., Lacy, P.E. - Streptozotocin-induced liver tumors, *Transplantation* 24:152-154, 1977
- 17 15. Feldman, S, Dodi, G, Haid, K, Scharp, DW, Ballinger, WF, Lacy, PE, Artificial hybrid pancreas, *Surgical Forum* 28:439-441, 1977
- 6 16. Scharp, D.W., Merrell, R.C., Feldman, S.D., Downing, R., Lacy P.E., Ballinger, W. - The use of gyrotational culture for the preservation of isolated islets, *Surgical Forum* 29:100-102, 1978
- 7 17. Scharp, D, Krupin, T, Waltman, S, Oestrich, C, Feldman, S, Ballinger, W ... Relationship of abnormal insulin release to fluorophotometry in experimental diabetes, *Diabetes* 27, 435-435, 1978.
18. Krupin, T., Waltman, S.R., Scharp, D.W., Oestrich, G., Feldman, S.D., Becker, D., Ballinger, W.F., Lacy, P.E. - Ocular fluorophotometry in experimental diabetes mellitus: The effect of pancreatic islet isografts, *Investigative Ophthalmology & Visual Science* 18:1185-190, 1979
- 5 19. Downing, R., Scharp, D.W., Merrell, R., Greideer, M., Ballinger, W.F. Venous versus ductal distension of the canine pancreas for isolation of islets, *Surgical Forum* 30:422-424, 1979.
20. Downing, R., Scharp, D.W., Ballinger, W.F. - An improved technique for the isolation and identification of mammalian islets of Langerhans, *Transplantation* 29:79-83, 1980
- 68 21. Lacy, P.E., Davie, J.M., Finke, E.H., Scharp, D.W. - Prolongation of islet allograft survival, *Transplantation* 27:171-174, 1979
- 73 22. Scharp, D.W., Downing, R., Merrell, R.C., Grieder, M. - Isolating the elusive islet, *Diabetes* 29(1):19- 30, 1980

23. Downing, R., Scharp, D.W., Merrell, R.C., Grieder, M., Ballinger, W.F. - Venous versus ductal distension of the dog pancreas for isolation of islets, *Surgical Forum* 30:422-424, 1979
- 6 24. Merrell, R.C., Scharp, D.W., Gingerich, R., Feldmeier, M.M., Grieder, M., Downing, R. - New approaches to the separation of islet cells, *Surgical Forum* 30:303-305, 1979
- 1980's 25. Feldman, S.D., Scharp, D.W., Lacy, P.E., Ballinger, W.F. - Fetal pancreas isografts, cultured and uncultured, to reverse streptozotocin induced diabetes mellitus, *J. Surgical Research* 29:309-318, 1980
- 9 26. Downing, R., Scharp, D.W., Ballinger, W.F., An improved technique for the isolation and identification of mammalian islets of Langerhans, *Transplantation* 29(1), 79.82, 1980.
- 30 27. Grieder, M.H., Gingerich, R.L., Scharp, D.W. - In Vitro studies of canine pseudo-islets. UCLA Symposium - Cellular Basis of Chemical Messengers in the Digestive System", Los Angeles, January 16-18, 1980
28. RV Rajotte, DW Scharp, R Downing, P Preston, GD Molnar, WF Ballinger, Transplantation of frozen-thawed rat islets of Lanagerhans after sucrose versus step dilution, *Cryobiology* 17 (6), 618-619, 1981.
- 6 29. Silberberg, R., Scharp, D.W., Lesker, P.A. - Biochemical studies of bone from diabetic rats and rats bearing transplanted pancreatic islets, *Experimental Cell Biology* 49:61-67, 1981
- 84 30. Rajotte, R.V., Scharp, D.W., Downing, R., Preston, R., Molnar, G.D., Ballinger, W.F. - Pancreatic islet banking: the transplantation of frozen-thawed rat islets transported between Centers, *Cryobiology* 18:357-369, 1981
31. Britt, L.D., Scharp, D.W. - Formation of pseudo-islets from neonatal pig pancreas, *Surgical Forum* 31:354-356, 1980
- 53 32. Britt, L.D., Stojeba, P.C., Scharp, C.R., Grieder, M.H., Scharp, D.W. - Neonatal pig pseudo-islets: A product of selective aggregation, *Diabetes* 30:580-583, 1981
33. Britt, L.D., Scharp, D.W., Lacy, P.E., Slavin, S. - Transplantation of islet cells across major histocompatibility barriers after total lymphoid irradiation and infusion of allogeneic bone marrow cells, *Diabetes* 31:36-38, 1982
34. Bergen, J., Mason, N.S., Scharp, D.W., Sparks, R.E. - Insulin inhibition of islets in transplantation chambers, *Artificial Organs* 5:787-791, 1981
35. Scharp, DW, Rejection of islet isografts in a strain of Lewis rats, *Transplantation* 31 (3) 229-230, 1981.
- 16 36. Paquette, T.L., Gingerich, R., Scharp, D.W. - Altered amidation of pancreatic polypeptide in culture, *Biochemistry* 20:7403-7408, 1981
- 2 37. Greider, MH, Gingerich, RL, Scharp, DW, in vitro studies of canine pseudo-islets, *Cellular Basis of Chemical Messengers in the Digestive System*, 317-321, 1981
- 93 38. Schmidt, R.E., Scharp, D.W. - Axonal dystrophy in experimental diabetic autonomic neuropathy, *Diabetes* 31:761-770, 1982
39. Yasunami, Y., Lacy, P.E., Scharp, D.W., Britt, L.D. - Isolation and transplantation of islet cells from the neonatal pig pancreas, *Surgical Forum* 33, 359-361, 1982
- 36 40. Sparks, R.E., Mason, N.S., Finley, T.C., Scharp, D.W., Development, testing, and modeling of an islet transplantation chamber, *ASAIO Journal* 28 91), 229-231, 1982.

- 7 41. Gingerich, R.L., Scharp, D.W., Grieder, M.H., Dye, E.S., Mousel, K.A. - A new in vitro model for studies of pancreatic polypeptide secretion and biochemistry, *Regulatory Peptides* 5:13-25, 1982
- 30 42. Britt, L.D., Scharp, D.W., Lacy, P.E., Slavin, S., Transplantation of islet cells across major histocompatibility barriers after total lymphoid irradiation and infusion of allogeneic bone marrow cells, *Diabetes* 31 (Supp 4), 63-68, 1982.
- 1 43. Scharp, DW, Lacy, PE, The isolation and alteration of islet tissue for transplantation. *In Vitro – Journal of the Tissue Culture Association.* 18 (3), 316-317, 1982.
44. Scharp, DW, Long, JA, Olack, BA, Preparation of pseudo-islets, *Cryobiology* 19 (6), 659-660, 1982.
- 3 45. Scharp, D.W., Long, J.A. - Studies of islet isolation and transplantation, *Cryobiology* 20:129-137, 1983
- 23 46. Long, J.A., Britt, L.D., Olack, B.J., Scharp, D.W. - Autotransplantation of isolated canine islets, *Transplant Proc.* 15:1332-1338, 1983
- 3 47. Sparks, RE, Mason, TC, Scharp, DW, A distributed source-model for the hybrid artificial pancreas, *ASAIO Journal* 29 (1), 460-462, 1983.
- 88 48. Schmidt, R.E., Santiago, B.P., Olack, B.J., Scharp, D.W. - The effect of pancreatic islet transplantation and insulin therapy on experimental diabetic autonomic neuropathy, *Diabetes* 32:532- 540, 1983
- 10 49. Giddings, S.J., Rotwein, P., Chirgwin, J.M., Scharp, D.W., Permutt, M.A. - Analysis of insulin gene expression in human pancreas, *Diabetes* 32:777-780, 1983
50. Scharp, D.W. - Isolation and transplantation of islet tissue, *World J. of Surgery* 8:143-151, 1984
51. Scharp, DW, Transplantation of pancreatic islet cells – Introduction, *World Journal of Surgery* 8 (2), 135-136, 1984
- 123 52. Scharp, D.W., Mason, N.S., Sparks, R.E. - Islet immunoisolation: the use of hybrid artificial organs to prevent islet tissue rejection, *World J. of Surgery* 8:221-229, 1984
- 13 53. Scharp, D.W. - Clinical feasibility of islet transplantation, *Transplant Proc.* 16(3):820-825, 1984
54. Sparks, RE, Mason, NS, Scharp, DW, Some Present Directions in Research on Tissue Transplantation Chambers, *Biomaterials in Artificial Organs*, 193-199, 1984.
55. Heiken, J.P., Balfe, D.M., Picus, D., Scharp, D.W. - Radical pancreatectomy: Postoperative evaluation by CT, *Radiology* 153:211-215, 1984
- 14 56. Martin, K.W., Morian, J.P., Jr., Lee, J.K.T., Scharp, D.W. - Demonstration of splenic artery pseudoaneurysm by Magnetic Resonance Imaging, *J. of Computer Assisted Tomography* 9(1):190- 192, 1985
- 24 57. Downing, R., Morrissey, S., Kiske, D., Scharp, D.W. - Does the purity of intraportal islet isografts affect their endocrine function?, *J. Surg. Research* 41(1):41-46, 1986
- 8 58. Scharp, D.W., Lacy, P.E., Alderson, D., Kneteman, N.M. - The procurement and distribution of cadaver human pancreas for islet isolation and transplantation. *The Use of Human Tissues and Organs for Research and Transplant: Proceedings of the Second International Conference: National Diabetes Research Interchange* April 1986:61-70
59. Scharp, D.W., Alderson, D., Kneteman, N.M. - Optimization of islet preparations for clinical transplantation. *Transplant Proc.* 18(6):1814-1816, 1986

- 6 60. Kneteman, N.M., Alderson, D., Scharp, D.W. - Cyclosporine A immunosuppression of allotransplanted canine pancreatic islets, *Transplant. Proc.*, 19(1):950-951, 1987
- 30 61. Alderson, D., Kneteman, N.M., Scharp, D.W. - The isolation of purified human islets of Langerhans, *Transplant Proc.* 19(1):916-917, 1987
- 41 62. Hymer, W.C., Scharp, D.W., et al. - Continuous flow electrophoretic separation of proteins and cells from mammalian tissues, *Cell Biophysics* 10:61-85, 1987
- 5 63. Scharp, D.W., Alderson, D., Kneteman, N.M. - The effect of immunosuppression on islet transplant function in the dog, *Transplant Proc.* 19(1) 952-953, 1987
- 21 64. Alderson, D., Kneteman, N.M., Olack, B.J., Scharp, D.W. - Isolation and quantification of canine islet tissue for transplantation, *Transplantation* 43(4):579-581, 1987
- 8 65. Kneteman, N.M., Alderson, D., Scharp, D.W. - The isolation and purification of human pancreatic islets, *Transplant Proc.* 19(4):3469-3470, 1987
66. Greider, MH, Scharp, DW, Gingerich, RL, Enhanced preservation of endosecretory granules in PP-cells of the canine pancreas. *Regulatory peptides* 18 (5-6), 299-306, 1987.
- 93 67. Scharp, D.W., Lacy, P.E., Finke, E., Olack, B.J. - Low-temperature culture of human islets isolated by the distention method and purified with Ficoll or Percoll gradients, *Surgery* 102:869-879, 1987
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69. Fonseca, P., Scharp, D.W. - Use of oxygen free radical scavengers to increase the yields of isolated rat islets after pancreatic warm ischemia, *Surgical Forum* 38:371-373, 1987
- 1,326 70. Ricordi, C., Lacy, P.E., Finke, E.H., Olack, B.J., Scharp, D.W. - Automated method for isolation of human pancreatic islets, *Diabetes* 37:413-420, 1988
- 39 71. Turk, J., Hughes, J.H., Easom, R.A., Wolf, B.A., Scharp, D.W., Lacy, P.E., McDaniel, M.L. - Arachidonic acid metabolism and insulin secretion by isolated human pancreatic islets, *Diabetes* 37:992-996, 1988
72. Corlett, M.P., Alderson, D., Kneteman, N.M., Scharp, D.W. - Long-term normoglycemia in canine islet autografts, *Transplant Proc* 20 (Suppl. 1):896-897, 1988
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- 69 74. Ricordi, C., Scharp, D.W., Lacy, P.E. - Reversal of diabetes in nude mice after transplantation of fresh and 7 day cultured (24°C) human pancreatic islets, *Transplantation* 45:994-996, 1988
75. Ricordi, C., Scharp, D.W., Lacy, P.E. - Mass isolation of human pancreatic islets for transplantation. *Proceedings from XXVI World Congress of the International College of Surgeons, Milan, Italy, July 3- 9, 1988, Monduzzi Editore S.p.A.*
- 29 76. Corlett, M.P., Scharp, D.W. - The effect of pancreatic warm ischemia on islet isolation in rats and dogs, *J. Surg. Research*, 45:531-536, 1988
- 21 77. Ricordi, C., Kneteman, N.M., Scharp, D.W., Lacy, P.E. - Transplantation of cryopreserved human pancreatic islets into diabetic nude mice, *World J. Surgery* 12:861-865, 1988
78. Kneteman, NM, Alderson,D, Scharp, DW, Lacy, PE. Long-term mass storage of purified human pancreatic islets, *Transplantation proceedings* 20 (5), 1023-1025, 1988.

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- 76 80. Scharp, D.W., Lacy, P.E., Ricordi, C., Boyle, P., Santiago, J., Cryer, P., Gingerich, R., Jaffe, A., Anderson, C.B., Flye, M.W. - Human islet transplantation in patients with Type 1 diabetes, *Transplant Proc* 21 (No. 1):2744-2745, February 1989
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