

**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 O<sub>2</sub>, 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
- 28 68. Kneteman, N.M., Alderson, D., Scharp, D.W. - Long-term normoglycemia in pancreatectomized dogs following pancreatic islet allotransplantation and cyclosporine immunosuppression, *Transplantation* 44(5):595-599, 1987
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
- 7 73. Corlett, M.P., Scharp, D.W., Lacy, P.E. - Microbial contamination risks in human islet isolation, *Transplant Proc* 20 (Suppl. 1):894-895, 1988
- 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.



- 74 79. Misler, S., Gee, W.M., Gillis, K.D., Scharp, D.W., Falke, L.C. - A metabolite-regulated ATP-sensitive K<sup>+</sup> channel in human pancreatic islet cells, *Diabetes* 38:422-427, 1989
- 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
- 4 81. Scharp, D.W. - Islet Transplantation, *Diabetes* 38: (Suppl. 1):323-325, 1989
- 370 82. Ricordi, C., Lacy, P.E., Scharp, D.W. - Automated islet isolation from human pancreas, *Diabetes* 38 (Suppl. 1):140-142, 1989
83. Kneteman, N.M., Alderson, D., Scharp, D.W., Lacy, P.E. - Prolonged cyropreservation of purified human pancreatic islets, *Diabetes* 38:176-178, 1989
- 40 84. Kneteman, N.M., Alderson, D., Scharp, D.W., Lacy, P.E. - Long-term cryogenic storage of purified adult human islets of Langerhans, *Diabetes* 38:386-396, 1989
- 97 85. Brelje, T.C., Scharp, D.W., Sorenson, R.L. - Three-dimensional imaging of intact, isolated islets of Langerhans using Confocal microscopy, *Diabetes* 38:808-814, 1989
- 12 86. Schmidt, R.E., Plurad, S.B., Olack, B.J., Scharp, D.W. - The effect of pancreatic islet transplantation and insulin therapy on neuroaxonal dystrophy in sympathetic autonomic ganglia of chronic Streptozotocin diabetic rats, *Brian Research* 497:393-398, 1989
- 10 87. Callery, M.P., Ricordi, C., Scharp, D.W., Kamei, T., Swanson, C.J., Lacy, P.E., Flye, M.W. - Hepatic insufficiency following portacaval shunting is prevented by prior intraportal pancreatic islet autotransplantation. *Surgery* 106:257-266, 1989
- 48 88. Dotta, F., Colman, P.G., Nayak, R.C., Lombardi, D., Scharp, D.W., Andreani, D., Pontieri, G.M., di Mario, U., Lenti, L., Eisenbarth, G.S. - Ganglioside expression in human pancreatic islets, *Diabetes* 38:1478-1483, 1989
- 97 89. Permutt, M.A., Koranyi, L., Keller, K., Lacy, P.E., Scharp, D.W., Mueckler, M. - Cloning and functional expression of a human pancreatic islet glucose-transporter cDNA, *Proc Natl Acad Sci USA* 86:8688- 8692, 1989
- 1990's 1 90. Callery, M.P., Kamei, T., Flye, M.W., Davis, C.G., Swanson, C.J., Olack, B.J., Lacy, P.E., Scharp, D.W. - Intrahepatic islet autografts in dogs function despite completely diverting portacaval shunt, *Transplant Proc* 22:767-770, 1990
- 454 91. Scharp, D.W., Lacy, P.E., Santiago, J.V., McCullough, C.S., Weide, L.G., Falqui, L., Marchetti, P., Gingerich, R.L., Jaffe, A.S., Cryer, P.E., Anderson, C.B., Flye, M.W. - Insulin independence after islet transplantation into Type 1 diabetic patient, *Diabetes* 39:515-518, 1990
- 9 92. Kämpe, O, Velloso, L, Andersson, A, Karlsson, A, Atkinson, MA, Maclaren, NK, Scharp, DW ... No role of 65 kD heat-shock protein in diabetes. *The Lancet* 336 (8725), 1250-1251, 1990.
- 8 93. Atkinson, M.A., Maclaren, N.K., Riley, W.J., Scharp, D.W., Lacy, P.E. - 64,000 Mr autoantibodies as predictors of insulin dependent diabetes, *Lancet* 335:1357-1360, 1990
94. Scharp, D.W., Olack, B.J., Swanson, C.J., Marchetti, P. - Normal reproductive function in dogs with islet autograft, *Transplant Proc* 22(5):2403-2404, 1990
95. Chern, H.T., Scharp, D.W. - Viability assessment of cryopreserved canine islets in vivo, *Endocrine Surgery* 7(3):355-360, 1990
96. Medoff, G., Sagal, S., Krogstad, D., Peters, M., Hogan, J., Scharp, D. - Clinical Pathology Conference - Abdominal pain, fever, and weight loss in a 61 year-old Arabian Man, *Am J Medicine* 89:83-90, 1990

- 3 97. Kneteman, NM, Cattral, MC, Warnock, GL, Scharp, DW, Jaspan, JL ...  
Immunosuppression and pancreatic islet transplantation, *Hormone and  
metabolic research. Supplement series 25*, 193-199, 1990.
- 567 98. Ricordi, C., Gray, D.W.R., Hering, B.J., et al - Islet isolation assessment in man  
and large animals, *Acta Diabetol. Lat. 27*:185-195, 1990
99. Atkinson, M.A., Maclaren, N.K., Holmes, L., Scharp, D.W., Lacy, P.E., Riley,  
W.J. - The natural history and predictive value of Mr 64,000 autoantibodies for  
insulin-dependent diabetes mellitus, *J Autoimmunity 3*:41-45, 1990
- 40 100. Atkinson, M.A., Holmes, L.H., Scharp, D.W., Lacy, P.E., Maclaren, N.K. -  
No evidence for serological autoimmunity to islet cell heat shock proteins in  
insulin dependent diabetes, *J Clin Invest 87*:721-724, 1991
101. Lacy, PE, Scharp, DW, Prevention of rejection of islet allografts and  
xenografts without continuous immunosuppression of the recipients, *Organ  
Transplantation 1990*, 397-404, 1991.
- 272 102. Scharp, D.W., Lacy, P.E., Santiago, J.V., McCullough, C.S., Weide, L.G.,  
Boyle, P.J., Falqui, L., Marchetti, P., Ricordi, C., Gingerich, R.L., Jaffe, A.S.,  
Cryer, P.E., Hanto, D.W., Anderson, C.B., Flye, M.W., - Results of our first nine  
intraportal islet allografts in Type 1, insulin-dependent diabetic patients,  
*Transplantation 51*:76-85, 1991
- 52 103. Finke, E., Marchetti, P., Falqui, L., Swanson, C., McLearn, M., Olack, B.,  
Scharp, D.W., Lacy, P.E. - Large scale isolation, function and transplantation of  
islets of Langerhans from the adult pig pancreas, *Transplant Proc 23*(1):772-  
773, 1991.
104. Olack, B., Swanson, C., McLearn, M., Longwith, J., Scharp, D.W., Lacy,  
P.E. - Islet purification using Euroficoll gradients, *Transplant Proc 23*(1):774-  
776, 1991
- 13 105. Scharp, D.W., Lacy, P.E., Weide, L.G., Marchetti, P., McCullough, C.S.,  
Flavin, K., Santiago, J.V. - Intraportal islet allografts: the use of a stimulation  
index to represent functional results, *Transplant Proc 23*(1):796-798, 1991
- 36 106. Falqui, L., Finke, E.H., Carel, J.C., Scharp, D.W., Lacy, P.E. - Marked  
prolongation of human islet xenograft survival (human to mouse) by low-  
temperature culture and temporary immunosuppression with human and mouse  
anti-lymphocyte sera, *Transplantation 51*:1322-1324, 1991
- 3 107. Scharp, D.W., Lacy P.E. - The clinical feasibility of human islet  
transplantation, *Clinical Diabetes 42- 45*, May/June, 1991
- 79 108. Marchetti, P., Finke, E.H., Gerasimidi-Vazeou, A., Falqui, L., Scharp,  
D.W., Lacy P.E.- Automated large scale isolation, in vitro function and  
xenotransplantation of porcine islets of Langerhans, *Transplantation 52*:209-  
213, 1991
- 5 109. Kowalski, L., Falqui, L., Lacy, P.E., Scharp, D.W. - Production of marked  
prolongation of survival of canine islet xenografts in mice by antilymphocyte sera  
and L3T4 antibody, *Transplantation 52*:1094- 1097, 1991
- 13 110. Marchetti, P., Swanson, C., McLearn, M., Finke, E.H., Gerasimidi-Vazeou,  
A., Scharp, D.W., Lacy, P.E. - In vitro function and xenotransplantation of long-  
term (3 weeks) cultured porcine islets of Langerhans, *Transplant Proc  
24*(2):637, 1992
- 17 111. Kneteman, N.M., Marchetti, P., Tordjman, K., Bier, D.M., Santiago, J.V.,  
Swanson, C.J., Olack, B.J., Scharp, D.W. - Effect of cyclosporine on insulin  
secretion and insulin sensitivity in dogs with intrasplenic islet autotransplants,  
*Surgery 111*(4):430-437, 1992

- 36 112. Scharp, D.W., Marchetti, P., Swanson, C.J., Newton, M., McCullough, C.S., Olack, B.J. - The effect of transplantation site and islet mass on long-term survival and metabolic and hormonal function of canine purified islet autografts, *Cell Transplantation* 1:245-254, 1992
113. Misler, S. Barnett, D.W., Pressel, D.M., Gillis, K.D., Scharp, D.W., Falke, L.C. - Stimulus-secretion coupling in B cells of transplantable human islets of
- 8 114. Marchetti, P., Scharp, D.W., Longwith, J.E., Swanson, C.J., Olack, B.J., Gerasimidi-Vazeou, A., Finke, E.H., Lacy, P.E. - Prevention of contamination of isolated porcine islets of Langerhans, *Transplantation* 53(6):1364-1366, 1992
115. Olack, B.J., Hill, A., Scharp, D.W., Lacy, P.E. - Automated purification of canine islets, *Transplant Proc* 24(3):1003-1004, 1992
- 9 116. Marchetti, P., Pfiffner, K., Scharp, D.W., Lacy, P.E., Gerasimidi-Vazeou, A., Finke, E.H. - Successful cryopreservation of porcine pancreatic islets, *Transplant Proc* 24(3):1005-1006, 1992
- 20 117. Scharp, D.W., Lacy, P.E., McLearn, M., Longwith, J.E., Olack, B.J. - The bioburden of 590 consecutive human pancreata for islet transplant research, *Transplant Proc* 24(3):974-975, 1992
- 6 118. McLearn, M., Marchetti, P., Finke, E., Gerasimidi-Vazeou, A., Scharp, D.W., Lacy, P.E. - Porcine islet function: Effects of arginine, Leucine, and Butyrate, *Transplant Proc* 24(3):980-982, 1992
- 18 119. Marchetti, P., Finke, E.H., Swanson, C., Gerasimidi-Vazeou, A., Olack, B., Scharp, D.W., Navalesi, R., Lacy, P.E. - The potential of porcine islet xenotransplantation in the therapy of diabetes, *Diab. Nutr. Metab.* 5 (Suppl 1):151-154, 1992
- 4 120. Marchetti, P., Scharp, D.W., Olack, B.J., Swanson, C.J., Bier, D., Colelli, C., Toffolo, G., Newton, M., Navalesi, R. - Glucose metabolism, insulin sensitivity and glucagon secretion in dogs with intraportal or intrasplenic islet autografts, *Transplant Proc* 24(6):2828-2829, 1992
- 1 121. Porte, D, Baker, L, Bollinger, R, Genuth, S, Scharp, DW, Sutherland, DRW, *Pancreas transplantation for patients with diabetes mellitus, Diabetes Care* 15 (11), 1673, 1992
- 5 122. Marchetti, P., Olack, B., Swanson, C., Newton, M., Scharp, D.W. - Assessment of long-term (1 year) graft survival and metabolic hormonal changes after intrasplenic canine pancreatic microfragment transplantation, *Diabetes & Metabolism* 19:17-24, 1993
- 361 123. Brelje, TC, Scharp, DW, Lacy, PE, Ogren, L, Talamantes, F, Robertson, M... Effect of homologous placental lactogens, prolactins, and growth hormones on islet B-cell division and insulin secretion in rat, mouse, and human islets, *Endocrinology* 132 (2), 879-887, 1993
- 74 124. Barnett, D.W., Pressel, D.M., Chern, H.T., Scharp, D.W., Misler, S. - cAMP-Enhancing agents "permit" stimulus-secretion coupling in canine pancreatic islet  $\beta$ -cells, *J. Membrane Biol* 138:113-120, 1994
- 16 125. Ansara, M.F., Saudek, F., Newton, M., Cryer, P.E., Scharp, D.W. - Pancreatic islet transplantation prevents defective glucose counter-regulation in diabetic dogs, *Transplant Proc.* 26(2):664-665, 1994
- 37 126. Shiroki, R., Poindexter, N., Mohanakumar, T., Scharp, D.W. - Rejection of human islet allografts in human lymphocyte-reconstituted severe combined immunodeficient mice, *Transplant Proc.* 26(2):716-717, 1994
- 3 127. Marchetti, P., Scharp, D.W., Finke, E., Swanson, C.J., Gerasimidi-Vazeou, A., Olack, B.J., Navalesi, R., Lacy, P.E. - Effect of different temporary

- immunosuppressive therapies and low-temperature culture on pancreatic islet xenograft survival (Pig-to-Mouse), *Transplant Proc.* 26(2):760-761, 1994
128. di Carlo, A., Scharp, D.W., Gingerich, R.L., Giannarelli, R., Ansara, M., Olack, B.J., Swanson, C.J., Navalesi, R. - Insulin and glucagon release from isolated, perfused human islets following low- temperature culture and cryopreservation, *Transplant Proc.* 26(2):821-822, 1994
- 31 129. Marchetti, P., Scharp, D.W., Pfiffner, K., Swanson, C.J., Finke, E.H., Olack, B.J., Gerasimidi-Vazeou, A., McLearn, M., Lacy, P.E. - Cryogenic storage of isolated, purified porcine pancreatic islets, *Transplantation* 57:340-346, 1994
130. Marchetti, P, Scharp, DW, Pfifner, K Cryogenic storage of isolated, purified porcine pancreatic islets, *Transplantation* 57:340-346, 1994
- 5 131. Marchetti, P., Kneteman, N.M., Swanson, C.J., Olack, B.J., Scharp, D.W. - Effect of cyclosporin treatment on metabolic and hormonal responses to mixed meal plus oral glucose in dogs with intrasplenic pancreatic islet autograft, *Experimental Medicine*, In ?
- 66 132. Marchetti, P., Scharp, D.W., McLearn, M., Gingerich, R., Finke, E.H., Olack, B.J., Swanson, C.J., Giannarelli, R., Navalesi, R., Lacy, P.E. - Pulsatile insulin secretion from isolated human pancreatic islets, *Diabetes* 43:827-830, 1994
133. Shiroki, R., Poindexter, N.J., Woodle, E.S., Hussain, M.S., Mohanakumar, T., Scharp, D.W. - Human peripheral blood lymphocyte reconstituted severe combined immunodeficient (hu-PBL-SCID) mice: a model for human islet allograft rejection, *Transplantation* 58:1555-1562, 1994
134. Shiroki, R, Poindexter, NJ, Mohanakumar, T, Scharp, DW, Rejection of human islet allografts in human lymphocyte-reconstituted severe combined immunodeficient mice, *Transplantation proceedings* 26 (2), 716-717, 1994.
- 181 135. Scharp, D.W., Swanson, C.J., Olack, B.J., Latta, P.P., Hegre, O.D., Doherty, E.J., Gentile, F.T., Flavin, K.S., Ansara, M.F., Lacy, P.E. - Protection of encapsulated human islets implanted without immunosuppression in patients with Type I and Type II diabetes and in non-diabetic controls, *Diabetes* 43:1167, 1994
- 10 136. Marchetti, P., Scharp, D.W., Finke, E.H., Giannarelli, R., Swanson, C.J., Olack, B.J., Lacy, P.E., Navalesi, R. - Factors affecting in vitro and in vivo function of isolated porcine islets, *Transplant Proc.* 26(6):3419-3420, 1994
137. di Carlo, A., Scharp, D.W., Gingerich, R.L., Ansara, M.F., Olack, B.J., Swanson, C.J., Giannarelli, R., Navalesi, R. - C-peptide secretion from isolated perfused human islets: effect of culture and cryopreservation, *Transplant Proc.* 26(6) 3399, 1994
- 20 138. Perdrizet, G.A., Rewinski, M.J., Schweizer, R.T., Scharp, D.W. - Heat shock and recovery protects pancreatic islets from warm ischemic injury, *Transplant Proc.* 26(6) 3477-3478, 1994
- 5 139. Marchetti, P., Scharp, D.W., Finke, E., Swanson, C.J., Gerasimidi-Vazeou, A., Olack, B.J., Navalesi, R., Lacy, P.E. - Anti-CD4 antibody treatment in xenografts of differently immunomodulated porcine islets, *Transplant Proc.* 26(3):1132, 1994
- 12 140. Scharp, DW, Gingerich, R, Giannarelli, RL Ansara, M, Olack, BJ ... Insulin and glucagon release from isolated, perfused human islets following low-temperature culture and cryopreservation, *Transplantation proceedings* 26 (2), 821-822, 1994.
- 2 141. Marchetti, P, Scharp, DW, Lacy, PE, Navalesi, R, Long-term survival of pig-to-mouse islet xenografts, *Xenotransplantation* 2 (3), 154-156, 1995.

- 4 142. Brennan, D.C., Scharp, D.W., White, N.H., Flavin, K.S., Zukosky, J.M., Ansara, M.F., Cryer, P.E., Lacy, P.E. - Modification of methodology results in improvements in simultaneous kidney-islet success, *Transplant Proc.* 27(1):1349-1350, 1995
- 7 143. Chern, H.T., Scharp, D.W. - Successful long-term cryopreservation of highly purified canine islets, *European Surg Res* 27:167-175, 1995
- 12 144. Shiroki, R, Mohanakumar, T, Scharp, DW, Analysis of the serological and cellular sensitization induced by encapsulated human islets transplantation in type 1 and the 2 diabetes patients, *Cell transplantation* 4 (5), 535-538, 1995.
- 13 145. Perdrizet, GA, Rewinski, MJ, Bartus, SA, Hull, D, Schweizer, RT, Scharp, DW, Albumin improves islet isolation: specific versus non-specific effects, *Transplantation proceedings* 27 (6), 3400-3402, 1995.
- 19 146. P Marchetti, DW Scharp, M McLearn, EH Finke, B Olack, C Swanson, ... , Insulin inhibits its own secretion from isolated, perfused human pancreatic islets, *Acta diabetologica* 32 (2), 75-77, 1995.
- 3 147. Borge, MA, Scharp, DW, Picus, D, Percutaneous ablation of a pancreatic remnant with intraductal injection of neoprene, *Journal of Vascular and Interventional Radiology* 6 (5), 762-764, 1995.
- 168 148. Davalli, AM, Ogawa, Y, Ricordi, C, Scharp, DW, Bonner-Weir, S, Weir, GC, A selective decrease in the beta cell mass of human islets transplanted into diabetic nude mice, *Transplantation* 59 (6), 817-820, 1995.
- 13 149. Marchetti, P, Scharp, DW, Giannarelli, R, Benzi, L, Cicchetti, P, Ciccarone, A... Metformin potentiates glucose-stimulated insulin secretion, *Diabetes Care* 19, 781-782, 1996.
- 1 150. Atkison, PR, Zucker, P, Hramiak, I, Paul, TL, Dupre, J, Behme, MT...Continued insulin dependence despite normal range insulin sensitivity and insulin connecting peptide levels in a kidney/islet transplant patient, *Diabetes Care* 19 (3), 236-240, 1996.
- 42 151. Marchetti, P., Scharp, D.W., Finke, E.H., Swanson, C.J., Olack, B.J., Gerasimidi-Vazeou, A., Giannarelli, R., Navalesi, R., Lacy, P.E. - Prolonged survival of discordant porcine islet xenografts, *Transplantation* 61:1100-1102, 1996
- 66 152. Hill, R.S., Cruise, G.M., Hager, S.R., Lamberti, F.V., Yu, X., Garufis, C.L., Yu, Y., Mundwiler, K.E., Cole, J.F., Hubbell, J.A., Hegre, O.D., Scharp, D.W. - Immunoisolation of adult porcine islets for the treatment of diabetes mellitus, *Annals of the NY Academy of Sciences* 831:332-343, 1997
- 2 153. Brennan, DC, Flavin, KS, Scharp, DW, Lacy, PE, Olack, BJ, Swanson, C ... Long-term (>30 months) follow-up of a single successful kidney-islet transplant recipient, *Transplantation proceedings* 29 (4), 2231-2233, 1997.
- 46 154. Olack, BJ, Swanson, CJ, Flavin, KS, Phelan, D, Brennan, DC, White, NH... Sensitization to HLA antigens in islet recipients with failing transplants, *Transplantation proceedings* 29 (4), 2268-2269, 1997
- 2 155. Swanson, CJ, Olack, BJ, Flavin, KS, Mohanakumar, T, Brennan, DC ... Comparison of transplanted islets in patients with functioning versus non-functioning allografts, *Transplantation proceedings* 29 (4), 2241-2242, 1997.
156. Cruise, G.M., Hegre, O.D., Scharp, D.W., Hubbell J.A., - A sensitivity study of the key parameters in the interfacial photopolymerization of poly(ethylene glycol) diacrylate upon porcine islets, *Biotech. Bioeng.* 57:655-665, 1998

- 2000's
157. Cruise, G.M., Scharp, D.W., Hubbell, J.A. - Characterization of permeability and network structure of interfacially photopolymerized poly(ethylene glycol) diacrylate hydrogels, *Biomaterials* 19:1287-1294, 1998
158. Cruise, G.M., Hegre, O.D., Lamberti, F.V., Hager, S.R., Hill, R., Scharp, D.W., Hubbell, J.A. - In vitro and in vivo performance of porcine islets encapsulated in interfacially photopolymerized poly(ethylene glycol) diacrylate membranes, *Cell Transplantation*, 8:293-306, 1999
- 2000's
159. Scharp, D, Yu, X, Sheckler, V, Hubbell, J, Latta, P. – Clinically relevant results from encapsulated islet allografts implanted subcutaneously in diabetic baboons without long term immunosuppression. *Diabetes* 54: Sup 194-OR, 2005.
- 2
160. Coutts, M, Hinton, S, Zheng, J, Scharp, DW – Hypothermic storage and preservation of human pancreatic acinar tissue. *In Vitro Cell Dev Biol* 43:2-6, 2007.
- 1
161. Scharp, DW, Encapsulated human islet allografts: providing safety with efficacy, *Cellular Transplantation*, 135-153, 2007.
- 18
162. Mirbolooki, MR, Taylor, GE, Knutzen, VK, Scharp, DW, Willcourt, R... Pulsatile intravenous insulin therapy: the best practice to reverse diabetes complications? *Medical hypotheses* 73 (3), 363-369, 2009.
- 2010's
- 15
163. W.M.Kühtreiber, L.T.,Ho, A.Kamireddy, J.A.W.,Yacoub, D.W.Scharp – Islet Isolation From Human Pancreas With Extended Cold Ischemia Time, *Transplantation Proceedings* 42: 2027- 2031, 2010.
- 123
164. David W. Scharp, MD & Piero Marchetti, MD, PhD “Encapsulated Islets for Diabetes Therapy: History, Current Progress, and Critical Issues Requiring Solution” *Advanced Drug Delivery Reviews*, 67-68: 35-73, August, 2014.
- 3
165. Tamaki, S., Nye, C., Slorach, E., Scharp, D., Blau, H.M., Whiteley, P., Pomerantz, J.H. – “Simultaneous silencing of multiple RB and p53 pathway members induces cell cycle reentry in intact human pancreatic islets.” *BMC Biotechnology* 14:86, 2014.
- 25
166. Bartlett, ST, Markmann, JF, Johnson, JF, Korsgren, O, Hering, BJ, Scharp, BJ... Report from IPITA-TTS opinion leaders meeting on the future of B-cell replacement, *Transplantation* 100 (Suppl 2), S1, 2016.
167. Submitted to *PLOS ONE* – March 9, 2018: Scharp, DW, Arulmoli, J, Morgan, K, Sunshine, H., Hao, E., Advances in human islet processing: manufacturing steps to achieve predictable islet outcomes from research pancreases.

## Reviews & Chapters:

- 1970's
1. Karl, R., Scharp, D.W., Ballinger, W.F., Lacy, P.E. - Progress Report: transplantation of insulin secreting tissue, *Gut*. 18:1062-1072, 1977
2. Lacy, P.E., Scharp, D.W., Ballinger, W.F. - Transplantation of the islets of Langerhans -Scientifique Francaise, Montpellier, France, 1977
- 1980's
3. Rajotte, R.V., Scharp, D.W., Molnar, G.D., Preston, R. - Feasibility of low temperature banking for pancreatic islet cell transplantation. In “Islet Isolation, Culture, and Cryopreservation”, Ed. K. Federlin and R.G. Bretzel. Thieme-Stratton, Inc., p. 124-135, 1981
4. Scharp, D.W., Downing, R., Merrell, R.C., Nunnally, S., Kiske, D., Grieder, M.H. - New approaches in the methods for isolating mammalian islets of Langerhans

- utilizing the dog pancreas. In "Islet Isolation, Culture, and Cryopreservation". Ed. K. Federlin and R.G. Bretzel. Thieme-Stratton, Inc. p. 9- 31, 1981
5. Slavin, S., Britt, L.D., Scharp, D.W., Lacy, P.E. - Treatment of experimental diabetes with histoincompatible islet allografts in rats conditioned with total lymphoid irradiation. In "Diabetic Renal- Retinal Syndrome", Volume 2. Ed. E.A. Friedman and E.A. L'Experance. Grune and Stratton, Inc., NY, p. 519-528, 1982
  6. Chen, Y., Mason, N.S., Scharp, D.W., Ballinger, W.F., Sparks, R.E. - Collagenase immobilized on cellulose acetate membranes. In "Biomaterials: Interfacial Phenomena and Applications". Ed. S.L. Cooper and N.A. Peppas, American Chemical Society, Washington, D.C., p. 483-491, 1982
  7. Scharp, D.W. - Hybrid Artificial Pancreas Panel Discussion. Transactions of the American Society for Artificial Internal Organs, 28:642-643, 1982
  8. Scharp, D.W. - Clinical Feasibility of Islet Transplantation, International Symposium on Organ Transplantation in Diabetes, The Netherlands 1983, Transplant Proc. 16:820-825, 1984
  9. Scharp, D.W., Mason, N.S., Sparks, R.E. - The use of hybrid artificial organs to provide immunoisolation to endocrine grafts. In "Bone Marrow & Organ Transplantation", Ed. S. Slavin, Elsevier Science Publishers, New York, p. 601-618, 1984
  10. Scharp, D.W., Long, J.A., Feldmeier, M.M., Olack, B.J., O'Shaughnessy, S., Swanson, C.J. - Automated methods for isolating and purifying islet cells from the pancreas. In "Methods in Diabetes Research", Ed. Larner and Pohl, New York, John Wiley & Sons, p. 237-243, 1984
  11. Scharp, D.W., Long, J.A., Feldmeier, M.M., Olack, B.J., O'Shaughnessy, S., Swanson, C.J. - Automated methods of mass islet isolation. In "Methods in Diabetes Research", Ed. Larner and Pohl, New York, John Wiley & Sons, p. 225-236, 1984
  12. Slavin, S., Weiss, L., Weigensberg, M., Morecki, S., Fuks, Z., Britt, L., Lacy, P.E., Scharp, D.W. - Tolerance to allo-antigens in rodents and reversal of streptozotocin-induced diabetes in tolerant rats by histo-incompatible islet allografts. In "Bone Marrow & Organ Transplantation", Ed. S. Slavin, Elsevier Science Publications, New York, 1984
  13. Williamson, J.R., Olack, B., Rowald, E.A., Chang, K., Scharp, D.W. - Effects of insulin treatment on collagen crosslinking in streptozotocin diabetic rats. In "Lessons from Animal Diabetes", Eds. E. Shafir and A. Renold, John Libbey, London, 1984, p. 402-404
  14. Lacy, P.E., Scharp, D.W. - Islet Transplantation in treating diabetes, Ann. Rev. Med., 37:33-40, 1986
  15. Scharp, D.W. - The elusive human islet: Variables involved in its effective recovery. In "Transplantation of the Endocrine Pancreas in Diabetes Mellitus", Eds. R. van Schifgaarde and M.A. Hardy, Elsevier Science Publications, Amsterdam, 1988, p. 97-107
  16. Scharp, D.W., Lacy, P.E. - Islet transplantation: a review of the objective, the concepts, the problems, the progress and the future. In "Transplantation of the pancreas", Eds. J.M. Dubernard and D.E.R. Sutherland, Kluwer Academic Publishers, The Netherlands, 1989, p. 455-478
  17. Scharp, D.W., Lacy, P.E. - Clinical islet transplantation. In "Excerpta Medica International Congress Series", Eds. R. Larkins, P. Zimmet, D. Chisholm, Elsevier Science Publishers, Amsterdam, 1989, p. 721-724
  18. McCullough, C.S., Scharp, D.W., Lacy, P.E. - Human islet isolation and transplantation. In "Immunologische and Dynamische Aspekte der

Insulinsubstitution beim Diabetes Mellitus”, Ed. R.G. Bretzel, Springer-Verlag, Heidelberg, 1990, p. 260-267

19. Atkinson, M.A., Maclaren, N.K., Scharp, D.W. - No role for 65KD heatshock protein in diabetes, (Letter) *Lancet* 336:1250-1251, 1990
20. Lacy, P.E., Scharp, D.W. - Islet cell transplantation. In “Diabetes Mellitus”, Fourth Edition, Eds. H. Rifkin and D. Porte, Jr., Elsevier Science Publications, New York, 1990, P. 880-886
21. McCullough, C.S., Scharp, D.W. - Pancreas and islet transplantation for the treatment of Type I diabetes mellitus. In “Surgical Management of the Diabetic Patient”, Eds. M. Bergman and G.A. Sicard, Raven Press, Ltd., New York, 1991, p. 349-362
22. Scharp, D.W. - Islet Transplantation: Approaches to a Clinical Therapy. In “Perspectives in General Surgery”, Vol 3, No. 1, Ed. Barry A. Levine, Quality Medical Publishers, St. Louis, MO, 1992, p. 93- 105
- 11 23. Scharp, D.W. - Islet quality control testing and the islet isolation laboratory. In “Pancreatic Islet Cell Transplantation”, Ed. Camillo Ricordi, R.G. Landes Company, Austin, 1992, p. 82-88
24. Scharp, D.W. - Clinical islet transplantation - registry report, accomplishments in the past and future research needs, Invited Commentary, *Cell Transplantation* 2:299, 1993
25. Scharp, D.W. - Pancreatic Islet Transplantation. In “Atlas of Organ Transplantation, Ed. M. Wayne Flye, W.B. Saunders Company, Philadelphia, PA, 1994, p. 209-220
26. Ansara, M.F., Cryer, P.E., Scharp, D.W. - Perioperative Management of the Diabetic Patient. In “Care of the Surgical Patient”, Ed. A. McHugh, Scientific American Medicine, New York, NY, 1994
- 2010's  
123 27. Scharp, D.W., Marchetti, P, Encapsulated islets for diabetes therapy: history, current progress, and critical issues requiring solution, *Advanced Drug Reviews*, 67 35-73, 2014.

**Published Abstracts: >150 not detailed**