

J. Benita Sjögren

Assistant Professor

Department of Medicinal Chemistry & Molecular Pharmacology,

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EDUCATION:

- 2008-2013 Postdoctoral Research Fellow, Department of Pharmacology, University of Michigan. Mentor: Dr. Richard R. Neubig
- 2004-2008 Ph.D., Pharmacology, Karolinska Institute, Department of Physiology and Pharmacology, Stockholm, Sweden. Advisor: Dr. Per Svenningsson
- 1997-2002 M.Sc., Molecular Biology, , Department of Neurochemistry, Stockholm University, Stockholm, Sweden. Advisor: Dr. Anna Forsby

PROFESSIONAL APPOINTMENTS:

- 2017-Present Assistant Professor, Department of Medicinal Chemistry & Molecular Pharmacology, Purdue University
- 2019-Present Adjunct Assistant Professor, Department of Pharmacology & Toxicology, Indiana University School of Medicine
- 2014-2017 Research Assistant Professor, Department of Pharmacology & Toxicology, Michigan State University
- 2013-2014 Senior Research Associate, Department of Pharmacology & Toxicology, Michigan State University
- 2002-2004 Research Engineer, Biovitrum AB, Department for Assay, Development and Screening, Stockholm, Sweden

AWARDS AND HONORS:

- 2019 Purdue College of Pharmacy BRAVO award
- 2013 American Society for Pharmacology and Experimental Therapeutics (ASPET) young Scientist Travel award, Experimental biology, Boston, MA
- 2011-2012 Postdoctoral Fellowship; The Swedish Heart- and Lung Foundation
- 2011 ASPET Molecular Pharmacology Division Postdoc Award, Experimental biology, Washington, DC
- 2011 ASPET young Scientist Travel award Experimental biology, Washington, DC
- 2009-2010 Postdoctoral Fellowship; The Swedish Research Council
- 2006 Karolinska Institute graduate student travel award, The 15th World Congress of Pharmacology (IUPHAR), Beijing, China

PROFESSIONAL SOCIETY MEMBERSHIPS:

- 2009-present The American Society for Pharmacology and Experimental Therapeutics (ASPET)
- 2010-2011 New York Academy of Sciences
- 2011-2017 The Swedish Pharmacy society (Apotekarsocieteten)
- 2013-present American Heart Association (AHA)
- 2017-present American Society for Biochemistry & Molecular Biology (ASBMB)
- 2017-present American Association of Colleges of Pharmacy (AACP)

PROFESSIONAL SOCIETY ENGAGEMENT:

- 2021-2022 Chair-elect; ASPET, Division for Drug Discovery and Development
- 2019-2021 Secretary/Treasurer; ASPET, Division for Drug Discovery and Development
- 2020-2021 Member, ASPET Nominating Committee
- 2018-2019 Secretary/Treasurer elect; ASPET, Division for Drug Discovery and Development
- 2015-present Executive Committee member; ASPET, Division for Drug Discovery and Development
- 2014-present Chair for the IUPHAR-BPS (British Pharmacology Society) Guide to Pharmacology Database – Subcommittee on RGS proteins

- 2014 NC-IUPHAR (International Union of Pharmacology Nomenclature Committee) biannual meeting, Paris, France
2011-2012 Executive Committee member; ASPET, Division for Molecular Pharmacology

SCIENTIFIC MEETING ORGANIZATION:

- 2021 Session Chair *Scientific Achievement Award Lecture and Notable Platform Presentations in Drug Discovery and Development* symposium at ASPET annual meeting, Experimental Biology (virtual meeting)
2020 Session Chair *Scientific Achievement Award Lecture and Notable Platform Presentations in Drug Discovery and Development* symposium at ASPET annual meeting, Experimental Biology, San Diego, CA (cancelled due to COVID-19 pandemic)
2016 Session Chair “*Emerging Roles for the Ubiquitin-Proteasome System in Therapeutics*” symposium at ASPET annual meeting, Experimental Biology, San Diego, CA
2012 Co-chair; Gordon-Keenan Research Seminar; “*Novel Mechanisms and Therapeutic Approaches in GPCR and Kinase Signaling*” University of New England, Biddeford, ME

EDITORIAL:

- 2021-2024 Journal of Medicinal Chemistry Early Career Editorial Advisory Board
2021-present Associate Editor; *Frontiers in Molecular Biosciences*, Section for Cellular Biochemistry
2020-present Review Editor; *Frontiers in Chemistry*, *Frontiers in Molecular Biosciences* and *Frontiers in Cell and Developmental Biology*

SCIENTIFIC JOURNAL REVIEWER:

Journal of Molecular and Cellular Cardiology (JMCC), *Pharmacological Research*, The AAPS journal, *Trends in Cardiovascular Medicine*, *Cellular Signaling*, *Oncogene*, *Science Signaling*, *SLAS Discovery*, *Neurotherapeutics*, *Scientific Reports*, *Frontiers in Molecular Biology*

GRANT REVIEWER:

- 2020 Reviewer for the Helping to End Addiction Long-term (HEAL) Initiative (NIH/NCATS)
2018 Reviewer: Purdue Research Foundation Graduate Student Fellowship
2018 Reviewer: Department of Medicinal Chemistry and Molecular Pharmacology (MCMP) research enhancement grants
2017-2018 External reviewer: The Natural Sciences and Engineering Research Council of Canada (NSERC)

INVITED RESEARCH TALKS:

- 2019 University Institute for Drug Discovery (PIDD) 6th Annual Symposium, West Lafayette, IN
2019 ASPET Annual Meeting, Experimental Biology, Orlando, FL
2018 Purdue University Institute for Integrative Neuroscience (PIIN), West Lafayette, IN
2017 Department of Chemistry, Purdue University, West Lafayette, IN
2017 Purdue University Institute for Drug Discovery (PIDD) 4th Annual Symposium, West Lafayette, IN
2017 Department of Medicinal Chemistry & Molecular Pharmacology, Purdue University, West Lafayette, IN
2017 Department of Pharmacology & Toxicology, University of Kansas, Lawrence, KS
2016 ASPET Annual Meeting, Experimental Biology 2016, San Diego, CA
2015 Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI
2015 Department of Pharmacology, Tulane University School of Medicine, New Orleans, LA
2015 University of Rochester Medical Center, Department of Pharmacology and Physiology, Rochester, NY
2015 Department of Physiology and Pharmacology, University of Western Ontario, London, ON, Canada.
2015 Department of Pharmaceutical and Biomedical Sciences seminar series, University of Georgia, Athens, GA
2014 Drug Discovery Lecture Series, Michigan State University, East Lansing, MI
2014 World Congress of Basic and Clinical Pharmacology, Cape Town, South Africa.

2014	Department of Pharmacology & Toxicology, Michigan State University, East Lansing, MI
2013	German Pharmacological Society DGPT Annual Meeting, Halle, Germany.
2012	DiscoverRx annual user forum, Cambridge, MA.
2012	University of Michigan Frontiers in Cardiovascular Science, Ann Arbor, MI
2011	12 th Annual Great Lakes GPCR retreat, Fairmont Chateau Montebello, Montebello, Quebec, Canada
2011	ASPET Annual Meeting, Experimental Biology, Washington, DC.
2011	The University of Michigan PSTP symposium, Ann Arbor, MI
2010	Perkin Elmer AlphaScreen user forum, Life Science Institute, University of Michigan, Ann Arbor, MI
2010	University of Michigan, Department of Pharmacology, Postdoctoral Fellow seminar series, Ann Arbor, MI

PUBLICATIONS: * indicates corresponding author

Articles:

1. McNabb HM, Gonzalez S, Muli CM, **Sjögren B***. (2020) N-terminal Targeting of Regulator of G Protein Signaling 2 for F-box Only Protein 44-mediated Proteasomal Degradation. *Mol. Pharmacol.* 98(6):677-685.
2. Phan HT, **Sjögren B**, Neubig RR. (2017) Human Missense Mutations in Regulator of G Protein Signaling 2 Affect the Protein Function Through Multiple Mechanisms. *Mol. Pharmacol.* 92(4):451-458.
3. Feng H, **Sjögren B**, Karaj B, Shaw V, Gezer A, Neubig RR. (2017) Movement disorder in GNAO1 encephalopathy associated with gain-of-function mutations. *Neurology.* 89(8):762-770.
4. Dong H, Zhang Y, Wang J, Kim DS, Wu H, **Sjögren B**, Gao W, Luttrell L, Wang H. (2017) Regulator of G protein signaling 2 is a key regulator of pancreatic β -cell mass and function. *Cell Death and Disease* 8:e2821.
5. Jones CL, Njomen E, **Sjögren B**, Dexheimer TS, Tepe JJ. (2017) Small Molecule Enhancement of 20S Proteasome Activity Targets Intrinsically Disordered Proteins. *ACS Chem Biol.* 12(9):2240-2247.
6. Ferland DJ, Darios ES, Neubig RR, **Sjögren B**, Truong N, Torres R, Dexheimer TS, Thompson JM, Watts SW. (2017) Chemerin-induced arterial contraction is Gi- and calcium-dependent. *Vascul. Pharmacol.* 88:30-41.
7. **Sjögren B***, Parra S, Atkins KB, Karaj B, Neubig RR. (2016) Digoxin-Mediated Upregulation of RGS2 Protein Protects against Cardiac Injury. *J. Pharmacol. Exp. Ther.* 357:1–9.
8. **Sjögren B***, Swaney S, Neubig RR. (2015) FBXO44-mediated degradation of RGS2 protein uniquely depends on a Cullin 4B/DDB1 complex. *PloS One.* 10(5): e0123581.
9. Raveh A, Schultz PJ, Aschermann L, Carpenter C, Tamayo-Castillo G, Cao S, Clardy J, Neubig RR, Sherman DH, **Sjögren B.*** (2014) Identification of PKC activation as a novel mechanism for RGS2 protein upregulation through phenotypic screening of natural product extracts. *Mol. Pharmacol.* 86(4):406-16.
10. Storaska AJ, Mei JP, Wu M, Li M, Wade SM, Blazer LL, **Sjögren B**, Hopkins CR, Lindsley CW, Lin Z, Babcock JJ, McManus OB, Neubig RR. (2013) Reversible inhibitors of regulators of G-protein signaling identified in a high-throughput cell-based calcium signaling assay. *Cell Signal.* 25(12):2848-55.
11. **Sjögren B**, Parra S, Heath LJ, Atkins KB, Xie Z-J, Neubig RR. (2012) Cardiotonic steroids stabilize RGS2 protein levels. *Mol Pharmacol* 82(3):500-9.
12. Eriksson TM, Holst S, Stan TL, Hager T, **Sjögren B**, Ogren SÖ, Svenningsson P, Stiedl O. (2012) 5-HT1A and 5-HT7 receptor crosstalk in the regulation of emotional memory: implications for effects of selective serotonin reuptake inhibitors. *Neuropharmacology* 63(6):1150-60.
13. Madeira A, Ohman E, Nilsson A, **Sjögren B**, Andrén PE, Svenningsson P. (2009) Coupling surface plasmon resonance to mass spectrometry to discover novel protein-protein interactions. *Nat Protoc.* 4(7):1023-37.
14. Svensson M, Boren M, Sköld K, Fälth M, **Sjögren B**, Andersson M, Svenningsson P, Andren PE. (2009) Heat stabilization of the tissue proteome: a new technology for improved proteomics. *J Proteome Res.* 8(2):974-81.
15. **Sjögren, B.**, Csöreg, L., Svenningsson, P. (2008) Cholesterol reduction attenuates 5-HT1A receptor-mediated signaling in human primary neuronal cultures. *Naunyn Schmiedebergs Arch Pharmacol.* 378(4):441-6.

16. Ohman E, Nilsson A, Madeira A, **Sjögren B**, Andrén PE, Svenningsson P. (2008) Use of surface plasmon resonance coupled with mass spectrometry reveals an interaction between the voltage-gated sodium channel type X alpha-subunit and caveolin-1. *J Proteome Res.* 7(12):5333-8.
17. **Sjögren, B.**, Svenningsson, P. (2007) Depletion of the lipid raft constituents, sphingomyelin and ganglioside, decreases serotonin binding at human 5-HT_{7(a)} receptors in HeLa cells. *Acta Phys.* 190(1):47-53.
18. **Sjögren, B.**, Svenningsson, P. (2007) Caveolin-1 affects serotonin binding and cell surface levels of human 5-HT_{7(a)} receptors. *FEBS Lett.* 581(26):5115-21.
19. Sköld, K., Nilsson, A., **Sjögren, B.**, Svensson, M., Pierson, J., Zhang, X., Caprioli, R.M., Buijs, J., Persson, B., Svenningsson, P., Andrén, P.E. (2007) Increased striatal mRNA and protein levels of the immunophilin FKBP-12 in experimental Parkinson disease and identification of FKBP12-binding proteins. *J. Proteome. Res.* 6(10):3952-61.
20. Sköld, K., Svensson, M., Norrman, M., **Sjögren, B.**, Svenningsson, P., Andrén, P.E. (2007) The significance of biochemical and molecular sample integrity in brain proteomics and peptidomics: Stathmin 2-20 and peptides as sample quality indicators. *Proteomics.* 7(24):4445-56.
21. **Sjögren, B.**, Hamblin, M.W., Svenningsson, P. (2006) Cholesterol depletion reduces serotonin binding and signaling via human 5-HT_{7a} receptors. *Eur. J. Pharm.* 553:1-10.

Reviews:

1. McNabb HM, Zhang Q, **Sjögren B***. (2020) Emerging roles for RGS2 in (patho)physiology. *Mol Pharmacol.* 98(6):751-760.
2. Ahlers-Dannen, K. E., Alqinyah, M., Bodle, C., Bou Dagher, J., Chakravarti, B., Choudhuri, S. P., Druey, K. M., Fisher, R. A., Gerber, K. J., Hepler, J. R., Hooks, S. B., Kantheti, H. S., Karaj, B., Lee, J.-K., Luo, Z., Martemyanov, K., Mascarenhas, L. D., Phan Thi Nhu, H., Roman, D. L., Shaw, V., **Sjögren, B.***, Spicer, M. M., Squires, K. E., Sutton, L., Wilkie, T. M., Xie, K. and Zolghadri, Y. (2020) "Regulators of G protein Signaling (RGS) proteins (version 2020.4) in the IUPHAR/BPS Guide to Pharmacology Database", IUPHAR/BPS Guide to Pharmacology CITE, 2020(4). doi: 10.2218/gtopdb/F891/2020.4.
3. Alexander SPH, Kelly E, Mathie A, Peters JA, Veale EL, Armstrong JF, Faccenda E, Harding SD, Pawson AJ, Sharman JL, Southan C, Buneman OP, Cidlowski JA, Christopoulos A, Davenport AP, Fabbro D, Spedding M, Striessnig J, Davies JA; **CGTP Collaborators**. (2019) THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Introduction and Other Protein Targets. *Br J Pharmacol.* 176 Suppl 1(Suppl 1):S1-S20.
4. **Sjögren B*** (2017) The evolution of RGS proteins as drug targets – 20 years in the making. *IUPHAR Review* 21. *Br. J. Pharmacol.* 174(6):427-437.
5. **Sjögren B**, Neubig RR. (2010) Thinking outside of the "RGS box": new approaches to therapeutic targeting of regulators of G protein signaling. *Mol Pharmacol.* 78(4):550-7.
6. Björk K, **Sjögren B**, Svenningsson P. (2010) Regulation of serotonin receptor function in the nervous system by lipid rafts and adaptor proteins. *Exp Cell Res.* 316(8):1351-6.

Book chapters:

1. **Sjögren B.*** (2011) Regulators of G protein signaling proteins as drug targets: Current state and future possibilities. *Adv. Pharm.* 62:315-347.
2. Madeira A, Vikeved E, Nilsson A, **Sjögren B**, Andrén PE, Svenningsson P. (2011) Identification of protein-protein interactions by surface plasmon resonance followed by mass spectrometry. *Curr Protoc Protein Sci.* 2011 Aug; Chapter 19; Unit 19.21.
3. **Sjögren B**, Blazer LL, Neubig RR. (2010) Regulators of G protein signaling proteins as targets for drug discovery. *Prog Mol Biol Transl Sci.* 91:81-119.

Database entries:

1. Hoa Phan Thi Nhu, **Benita Sjögren**. R4 family: regulator of G-protein signaling 2. Last modified on 14/09/2015. IUPHAR/BPS Guide to PHARMACOLOGY. <http://guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2808>.

2. Vincent Shaw, **Benita Sjögren**. R4 family: regulator of G-protein signaling 4. Last modified on 14/09/2015. IUPHAR/BPS Guide to PHARMACOLOGY, <http://guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2811>.
3. Kirk M. Druey, Rory A. Fisher, Zili Luo, Hoa Phan Thi Nhu, Vincent Shaw, Thomas Wilkie, Yalda Zolghadri, **Benita Sjögren**. R4 family. IUPHAR/BPS Guide to PHARMACOLOGY <http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=893>

ABSTRACTS:

- 2021 Q. Zhang, **B. Sjögren** “*Role of RGS2 in Gαq-dependent uveal melanoma*” Experimental Biology, virtual meeting
- 2020 H. McNabb, S. Gonzalez, **B. Sjögren** “*N-terminal targeting of RGS2 for FBXO44-mediated proteasomal degradation*” Experimental Biology, San Diego, CA (cancelled due to COVID-19 pandemic)
- 2019 H. McNabb, S. Gonzalez, **B. Sjögren** “*N-terminal targeting of RGS2 for FBXO44-mediated proteasomal degradation*” MCMP Departmental Retreat, Turkey Run, IN
- 2018 H. McNabb, S. Gonzalez, **B. Sjögren** “*Regulation of Degradation of RGS2*” MCMP Departmental Retreat, Turkey Run, IN
- 2018 **B. Sjögren** “*FBXO44-mediated RGS2 protein degradation uniquely depends on a novel Cullin 4B/DDB1 E3 ligase complex*” The 18th World Congress of Pharmacology (IUPHAR), Kyoto, Japan
- 2018 **B. Sjögren** “*FBXO44-mediated RGS2 protein degradation uniquely depends on a novel Cullin 4B/DDB1 E3 ligase complex*” Keystone meeting: Ubiquitin Signaling, Lake Tahoe, CA
- 2017 B. Karaj, **B. Sjögren**, R.R. Neubig “*Identification of Novel Small Molecule Stabilizers of RGS4 Protein Levels*” Experimental Biology, Chicago, IL
- 2017 **B. Sjögren** “*Molecular Characteristics of FBXO44-mediated RGS2 Protein Degradation*” Experimental Biology, Chicago, IL
- 2015 **B. Sjögren**, Swaney, R.R. Neubig “*FBXO44-mediated degradation of RGS2 protein uniquely depends on a Cullin 4B/DDB1 complex*” The 16th Annual GPCR Retreat, Toronto, ON, Canada
- 2015 H. Phan, **B. Sjögren**, R.R. Neubig “*Behavior of human mutations in Regulator of G protein Signaling 2 (RGS2) in vitro.*” The 16th Annual GPCR Retreat, Toronto, ON, Canada
- 2015 **B. Sjögren**, Swaney, R.R. Neubig “*FBXO44-mediated degradation of RGS2 protein uniquely depends on a Cullin 4B/DDB1 complex*” Cutting Edge/Drug Discovery & Development in Michigan, East Lansing, MI
- 2015 **B. Sjögren**, S. Swaney, R.R. Neubig “*RGS2 protein degradation is mediated by a novel Cullin 4B/F-box 44 E3 ligase complex*” Gordon Research Conference: “Molecular Pharmacology - Connecting G Protein-Coupled Receptor Mechanisms to Physiological Functions”, Ventura Beach, CA.
- 2015 **B. Sjögren**, A.J. Storaska, S., Lisabeth E.M., Swaney, R.R. Neubig “*FBXO44-mediated degradation of RGS2 protein uniquely depends on a Cullin 4B/DDB1 complex*” GTC Bio 5th Ubiquitin Research and Drug Discovery Conference, San Diego, CA.
- 2015 **B. Sjögren**, A.J. Storaska, S., Lisabeth E.M., Swaney, R.R. Neubig “*FBXO44-mediated degradation of RGS2 protein uniquely depends on a Cullin 4B/DDB1 complex*”, Boston, MA.
- 2015 L. Aschermann, **B. Sjögren** “*PKC Activation Leads to Increased RGS2 Protein Levels*” Experimental Biology, Boston, MA.
- 2014 **B. Sjögren**, A.J. Storaska, S. Swaney, R.R. Neubig “*RGS2 protein degradation is mediated by a novel Cullin 4B/F-box 44 E3 ligase complex*” The 17th World Congress of Basic and Clinical Pharmacology (IUPHAR), Cape Town, South Africa
- 2014 **B. Sjögren**, A.J. Storaska, S. Swaney, R.R. Neubig “*RGS2 protein degradation is mediated by a novel Cullin 4B/F-box 44 E3 ligase complex*” Experimental Biology, San Diego, CA
- 2014 **B. Sjögren**, A.J. Storaska, S. Swaney, R.R. Neubig “*RGS2 protein degradation is mediated by a novel Cullin 4B/F-box 44 E3 ligase complex*” The Ubiquitin System in Health and Disease; Keystone meeting, Big Sky, MO
- 2013 **B. Sjögren**, A. Raveh, P.J. Schultz, C. Carpenter, G. Tamayo-Castillo, S. Cao, J. Clardy, D.H. Sherman, R.R. Neubig “*PKC activation identified as a novel mechanism for RGS2 protein upregulation in a phenotypic screen of natural product extracts*” 14th Annual Great Lakes GPCR retreat, Cleveland, OH
- 2013 **B. Sjögren**, A.J. Storaska, S. Swaney, R.R. Neubig, “*Targeting degradation pathways of RGS2 using high-throughput RNAi screening*” Experimental Biology, Boston, MA

- 2012 **B. Sjögren**, S. Swaney, R.R. Neubig, “*Targeting degradation pathways of RGS2 using high-throughput RNAi screening*” 13th Annual Great Lakes GPCR retreat, London, ON Canada
- 2012 **B. Sjögren**, S. Swaney, R.R. Neubig, “*Targeting degradation pathways of RGS2 using high-throughput RNAi screening*” Phosphorylation & G-Protein Mediated Signaling Networks; Gordon Research conference, University of New England, Biddeford, ME
- 2012 **B. Sjögren**, S. Swaney, R.R. Neubig, “*Targeting degradation pathways of RGS2 using high-throughput RNAi screening*” Experimental Biology, San Diego, CA
- 2011 **B. Sjögren**, S. Swaney, R.R. Neubig, “*Targeting degradation pathways of RGS2 using high-throughput RNAi screening*” 12th Annual Great Lakes GPCR retreat
- 2011 **B. Sjögren**, S. Swaney, A.J. Haak, L.J. Heath, R.R. Neubig “*Targeting degradation pathways of RGS2 for novel cardiovascular therapeutics*” Experimental Biology, Washington, DC
- 2010 **B. Sjögren**, S. Swaney, L.J. Heath, A. McClafferty, R.R. Neubig “*Targeting degradation pathways of RGS2 for novel cardiovascular therapeutics*” 11th Annual Great Lakes GPCR retreat, University of Toronto, Kingsfield, Ontario, Canada
- 2010 **B. Sjögren**, R.R. Neubig “*Cell-based screening for modulators of Regulator of G protein Signaling protein 9 (RGS9) – implications in Parkinson’s disease*” Parkinson's Disease Therapeutics Conference, The New York Academy of Sciences, New York, NY
- 2010 **B. Sjögren**, R.R. Neubig “*Cell-based screening for modulators of Regulator of G protein Signaling protein 9 (RGS9) – implications in Parkinson’s disease*” The 16th World Congress of Basic and Clinical Pharmacology (IUPHAR), Copenhagen, Denmark
- 2009 **B. Sjögren**, L.J. Heath, R.R. Neubig “*Development of a cell based assay for high throughput RNAi screening of RGS2 expression*” 10th Annual Great Lakes GPCR retreat, University of Rochester, Rochester, NY
- 2008 **B. Sjögren**, P. Svenningsson “*Caveolin-1 affects serotonin binding and cell surface levels of human 5-HT(7(a)) receptors*” 8th International symposium on biochemical roles of eukaryotic cell surface macromolecules, Hyderabad, India
- 2006 **B. Sjögren**, P. Svenningsson, “*Depletion of the lipid raft constituents, sphingomyelin and ganglioside, decreases serotonin binding at human 5-HT7(a) receptors*” Nordic meeting on G protein-coupled receptors – from molecular aspects to novel therapy, Stockholm, Sweden
- 2006 **B. Sjögren**, M.W. Hamblin, P. Svenningsson “*Cholesterol depletion reduces serotonin binding and signaling via human 5-HT_{7a} receptors*” The 15th World Congress of Basic and Clinical Pharmacology (IUPHAR), Beijing, China
- 2005 **B. Sjögren**, A. Nilsson, K. Sköld, M. Svensson, J. Buijs, B. Persson, P. Svenningsson, P. André “*Use of surface plasmon resonance coupled with mass spectrometry to identify FKBP-12 interacting proteins*” Human Proteome Organization, 4th World congress, Munich, Germany

RESEARCH SUPPORT:

Active:

- 2019-2021 National Institutes of Health; NIA 1R21AG064416-01
“*Assay development and screening for small molecule RGS10 regulators to target neuroinflammation*”
PI: **Sjögren B.**/Hooks S.B.
\$424,000
- 2017-2023 Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University start-up funds.
PI: **Sjögren B**
\$902,000
- 2019-2021 PIDD HTS Facility Credit
PI: **Sjögren B**
\$15,000

Completed:

- 2018-2019 Showalter Trust Research Award
“*Molecular basis for F-box protein 44 substrate recognition*”
PI: **Sjögren B.**
Co-PI: Tesmer, J.J.

\$75,000

- 2015-2018 American Heart Association Scientist Development Grant; 15SDG21630002
“*Targeting molecular mechanisms of RGS2 protein degradation for novel cardiovascular therapeutics*”
PI: **Sjögren B.**
\$308,000
- 2014-2017 National Institutes of Health; NIGMS R01 GM110195
“*Small molecule stabilizers of RGS protein expression*”
PI: Neubig R.R./Tepe J.; **Sjögren B. Co-I**
\$306,000

TEACHING:

Graduate courses:

- 2020-2021 Instructor, Integrated Pharmacotherapy III (PHRM845), College of Pharmacy, Purdue University.
- 2018-2019 Instructor; Biochemistry with Clinical Implications (PHRM836), College of Pharmacy, Purdue University.
- 2019 Instructor, Medical Pharmacology (IUSM610), Indiana School of Medicine West Lafayette
- 2016 Course director; IPSTP T32 Training Grant Drug Discovery Bootcamp, Department of Pharmacology & Toxicology, Michigan State University.
- 2016 Instructor; Physiology and Pharmacology of Excitable Cells (PHM827); section on G protein-coupled ion channels, Department of Pharmacology & Toxicology, Michigan State University.
- 2016 Instructor; Fundamental Principles of Pharmacology and Toxicology (PHM801); section on Drug Discovery and High-throughput Screening, Department of Pharmacology & Toxicology, Michigan State University.
- 2006-2008 Instructor, Pharmacology for the MS program in Biomedicine; section on Receptor Pharmacology, Department of Physiology and Pharmacology, Karolinska Institute, Stockholm, Sweden
- 2004-2007 Laboratory Advisor in Pharmacology, the Medical Doctor program and the MS program in Biomedicine, Karolinska Institute, Stockholm, Sweden
- 2004-2007 Laboratory Advisor in Neuroscience for the Medical Doctor program and the MS program in Biomedicine, Karolinska Institute, Stockholm, Sweden
- 2005-2007 Examiner for oral exams in Pharmacology for the Medical Doctor program and the MS program in Biomedicine, Karolinska Institute, Stockholm, Sweden
- 2005-2007 Examiner for oral exams in Neuroscience for the Medical Doctor program and the MS program in Biomedicine, Karolinska Institute, Stockholm, Sweden

Undergraduate courses:

- 2018-2021 Instructor; Biochemistry for Pharmaceutical Sciences (MCMP208), Department of Medicinal Chemistry & Molecular Pharmacology, Purdue University.
- 2016-2017 Instructor; ASPET undergraduate summer program in Pharmacology; section on G Protein-coupled Receptors, Department of Pharmacology & Toxicology, Michigan State University.
- 2015-2017 Instructor; Introduction to Chemical Toxicology (PHM450) Section on Cardiovascular and Renal Toxicology, Department of Pharmacology & Toxicology, Michigan State University.
- 2015 Instructor; ASPET undergraduate summer program in Pharmacology; section on Receptor Pharmacology, Department of Pharmacology & Toxicology, Michigan State University.
- 2012 Instructor; ASPET undergraduate summer program in Pharmacology; section on Receptor Pharmacology, Department of Pharmacology, University of Michigan.
- 2006-2008 Instructor, Pharmacology, Computer Medicine Program; section on Receptor Pharmacology, Department of Physiology and Pharmacology, Karolinska Institute, Stockholm, Sweden

RESEARCH MENTORSHIP:

Graduate Students:

- 2021-present Stephanie Gonzalez; MCMP graduate student
- 2020-present Sabiha Chowdhury; MCMP graduate student

2018-present Qian Zhang; MCMP graduate student
2017-present Harrison McNabb; MCMP graduate student
2017-2018 Brandon Crotchett; MCMP graduate student, Research MS

Graduate Student Rotations:

2010 Larisa Kruger, Department of Pharmacology, University of Michigan
2013 Colleen Carpenter, Department of Pharmacology, University of Michigan
2014 Jamal Mohamoud, Department of Pharmacology and Toxicology, Michigan State University
2015 Nguyen Truong, Department of Pharmacology and Toxicology, Michigan State University
2017 Ruoxuan Sun, MCMP graduate program
2017 Harrison McNabb, MCMP graduate program
2017 Brandon Crotchett, MCMP graduate program
2018 Jacob Verburgt, MCMP graduate program
2018 Sherry Liang, MCMP graduate program
2018 Isaac Melendez, MCMP graduate program
2018 Firoj Kumar Sahoo, MCMP graduate program
2019 Crystal Diaz, MCMP graduate program
2019 Sabiha Chowdhury, MCMP graduate program
2020 Tiana Dunne, MCMP graduate program
2020 Stephanie Gonzalez, MCMP graduate program

Undergraduate Students:

2006-2008 Elisabeth Vikeved, Department of Physiology and Pharmacology, Karolinska Institute
2009-2010 Lauren J. Heath, Department of Pharmacology, University of Michigan; ASPET SURF fellowship summer 2010
2010 Anthony McClafferty, Department of Pharmacology, University of Michigan
2011 Mila Quinn, Department of Pharmacology, University of Michigan
2012 Kevin Trujillo, Department of Pharmacology, University of Michigan
2012 William Spencer, Department of Pharmacology, University of Michigan
2013-2015 Lauren Aschermann, Department of Pharmacology and Toxicology, Michigan State University; ASPET SURF fellowship summer 2015
2017-2018 Renee Towers, Purdue University, Biological Sciences program
2018-2019 Siena Cooper, Purdue University College of Pharmacy, BSPS
2019 Jessica Wood, Purdue University, summer intern

Preliminary Exam Committees:

2018 Kyle Harvey, Purdue College of Pharmacy, MCMP
2018 Chandnee Chandrasekaran, Purdue University Life Science Education Program (PULSe)
2018 Wenzhi Tian, Purdue College of Pharmacy, MCMP
2019 Christine Muli, Purdue College of Pharmacy, MCMP
2019 Anna Guthridge, Committee Chair, Purdue College of Pharmacy, MCMP
2019 Sijie Wang, Purdue College of Pharmacy, MCMP
2020 Ian Pelfrey, Committee Chair, Purdue College of Pharmacy, MCMP
2020 Yiming Miao, Purdue University Life Science Education Program (PULSe)
2020 Yi-Hsun Ho, Purdue College of Pharmacy, MCMP
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PhD Dissertation Committees:

2014-2018 Hoa Phan, Department of Pharmacology and Toxicology, Michigan State University (Neubig)
2015-2019 Vincent Shaw, Department of Pharmacology and Toxicology, Michigan State University (Neubig)
2018-present Anna Guthridge, Purdue College of Pharmacy, MCMP (VanRijn)
2019-present Isaac Melendez, Purdue College of Pharmacy, MCMP (Tesmer)
2019-present Ian Pelfrey, Purdue College of Pharmacy, MCMP (Watts)
2019-present Jiajun Dong, Purdue College of Pharmacy, MCMP (Z-Y Zhang)

2020-present Yazan Meqbil, Purdue College of Pharmacy, MCMP (VanRijn)
2020-present Muhammad Safdar, Purdue College of Pharmacy, MCMP (Wendt)
2020-present Yueyi Chen, Purdue College of Pharmacy, MCMP (Tesmer)