REBECCA A. MARKS

ACADEMIC A	APPOINTMENTS
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Purdue University	January 2025 –
Assistant Professor, Human Development and Family Science	
Magaachygatta Ingtituta of Tachyalogy	2021 2024
Massachusetts Institute of Technology	2021 - 2024
Postdoctoral Fellow, McGovern Institute for Brain Research	
MGH Institute of Health Professions	2021 - 2023
Postdoctoral Fellow, Department of Communication Sciences and Disorders	
Harvard University	2023 - 2024
Lecturer, Harvard Graduate School of Education	
EDUCATION	
University of Michigan	
Ph.D., Education and Psychology	2021
M.S., Psychology	2017
Washington University in Ct. Levis	
Washington University in St. Louis	2012
B.A., Philosophy-Neuroscience-Psychology	2013

RESEARCH INTERESTS

General Areas: Developmental cognitive neuroscience, language, reading, bilingualism, learning disabilities, diverse learners, brain development

Methodologies: fMRI, fNIRS, behavioral neurocognitive assessments

GRANT FUNDING

Neurocognitive Foundations of Morphological Processing in Children with Dyslexia 2023 – 2026 NIH F32 HD110967 (PI: Marks)

PUBLICATIONS

†Indicates dual first authorship; *Student mentee

JOURNAL ARTICLES

- 1. **Marks, R. A.,** Eggleston, R., L., & Kovelman, I. (2024). Brain bases of morphological awareness and longitudinal word reading outcomes. *Journal of Experimental Child Psychology*, 238, 1-19. https://doi.org/10.1016/j.jecp.2023.105802
- 2. Marks, R. A., Pollack, C., Meisler, S. L., D'Mello, A. M., Centanni, T. M., Romeo, R. R., Wade, K., Matejko, A. A., Ansari, D., Gabrieli, J. D. E., & Christodoulou, J. A. (2024). Neurocognitive mechanisms of co-occurring math difficulties in dyslexia: Differences in executive function and visuospatial processing. *Developmental Science*, 27(2), 1-17. http://doi.org/10.1111/desc.13443
- 3. Eggleston, R. L., **Marks, R. A.,** Sun, X., Yu, C.-L., Zhang, K., Nickerson, N., Hu, X., Caruso, V., & Kovelman, I. (2024). Lexical morphology as a source of risk and resilience for learning to read with dyslexia: An fNIRS investigation. *Journal of Speech, Language, and Hearing Research*, 67, 2269-2282. http://doi.org/10.1044/2024_JSLHR-23-00293

- 4. Christodoulou, J. A., Azor, A. M., & **Marks, R. A.** (2023). Reaching students with reading disabilities during the summer. *Insights from the Behavioral and Brain Sciences*, 0(0). https://doi.org/10.1177/23727322231220636
- 5. Kepinska, O., Caballero, J., Oliver, M., **Marks, R. A.**, Haft, S. L., Zekelman, L., Kovelman, I., Uchikoshi, Y., & Hoeft, F. (2023). Typological linguistic diversity and L1 lexical knowledge and processing in kindergarteners: Behavioral and neural signatures. *Scientific Reports*, *13*, 1947. https://doi.org/10.1038/s41598-023-27952-2
- 6. Sun, X., Marks R. A., Zhang, K., Yu, C.-L., Eggleston, R. L., Nickerson, N., Chou, T.-L., Hu, X.-S., Tardif, T., Satterfield, T., & Kovelman, I. (2023). Brain bases of English morphological processing: A comparison between Chinese-English, Spanish-English bilingual, and English monolingual children. *Developmental Science*, 26, 1-16. https://doi.org/10.1111/desc.13251
- 7. Zhang, K., Sun, X., Yu, C.-L., Eggleston, R., **Marks, R. A.,** Nickerson, N., Caruso, V., Hu, X., Tardif, T., Chou, T.-L., Booth, J., & Kovelman, I. (2023). Phonological and morphological literacy skills in English and Chinese: A cross-linguistic neuroimaging comparison of Chinese-English bilingual and monolingual English children. *Human Brain Mapping*, *44*(13), 4812-4829. https://doi.org/10.1002/hbm.26419
- 8. Marks, R. A., Eggleston, R. L., Sun, X., Yu, C.-L., Zhang, K., Nickerson, N., Hu, X.-S., & Kovelman, I. (2022). The neurobiological basis of morphological processing for typical and impaired readers. *Annals of Dyslexia*, 72, 361-383. https://doi.org/10.1007/s11881-021-00239-9
- 9. **Marks, R. A.,** Norton, R., Mesite, L., Fox, A. B., & Christodoulou, J. (2022). Risk and resilience correlates of reading among adolescents with language-based learning disabilities during COVID-19. *Reading & Writing*. https://doi.org/10.1007/s11145-022-10361-8
- 10. **Marks, R. A.**, Labotka, D., Sun, X., Nickerson, N., Zhang, K., Eggleston, R., Yu, C.-L., Uchikoshi, Y., Hoeft, F., & Kovelman, I. (2022). Morphological awareness and its role in early word reading in English monolinguals, Spanish-English, and Chinese-English simultaneous bilinguals. *Bilingualism: Language & Cognition*, 1-15. https://doi.org/10.1017/S1366728922000517
- 11. **Marks, R. A.,** Sun, X., McAlister López, E.*, Caruso, V., Nickerson, N., Hernandez, I., Satterfield, T., & Kovelman, I. (2022). Cross-linguistic transfer of morphological awareness and reading skill in Spanish-English simultaneous bilingual children. *International Journal of Bilingual Education and Bilingualism*, 10, 3907-3923. https://doi.org/10.1080/13670050.2022.2090226
- 12. Sun, X., **Marks, R. A.,** Eggleston, R. L., Zhang, K., Yu, C.-L., Nickerson, N., Caruso, V., Chou, T.-L., Hu, X.-S., Tardif, T., Booth, J. R., Beltz, A. M., & Kovelman, I. (2022). Bilingual proficiency enhances neural network density: Sources of heterogeneity in children's functional connectivity during English word processing. *Neurobiology of Language*, https://doi.org/10.1162/nol_a_00092
- 13. Li, H., Wu, J., **Marks, R. A.,** Huang, H., Li, L., Dong, L., Luo, Y.-J., Tao, W., & Ding, G. (2022). Functional mapping and cooperation between the cerebellum and cerebrum during word reading. *Cerebral Cortex*, *32*(22), 5175-5190. https://doi.org/10.1093/cercor/bhac006

- 14. Wagley, N., **Marks, R. A.**, Bedore, L. & Kovelman, I. (2022). Contributions of bilingual home environment and language proficiency to children's Spanish-English reading outcomes. *Child Development*, *93*(4), 881-899. https://doi.org/10.1111/cdev.13748
- 15. Sun, X., **Marks, R. A.,** Eggleston, R, Zhang, K., Lau, C., Yu, C.L., Nickerson, N., Kovelman, I. (2022). Impacts of the COVID-19 disruption on the language and literacy development of monolingual and heritage bilingual children in the United States. *Reading and Writing*, https://doi.org/10.1007/s11145-022-10388-x
- Li, H., Marks, R. A., Liu, L., Zhang, J., Zhong, H., Feng, X., Zhang, M., Yang, X., Liu, L., Meng, X., & Ding, G. (2021). The selective contributions of the right cerebellar lobules to print processing. *Brain Structure & Function*, 227, 963-977. https://doi.org/10.1007/s00429-021-02434-1
- 17. Sun, X., Zhang, K., **Marks, R. A.,** Nickerson, N., Eggleston, R., Yu, C.-L., Chou, T. L., Tardif, T., & Kovelman, I. (2021). What's in a word? Cross-linguistic influences on Spanish-English and Chinese-English bilingual children's word reading development. *Child Development*, *93*(1), 84-100. https://doi.org/10.1111/cdev.13666
- 18. Li, H., Kepinska, O., Caballero, J. N., Zekelman, L., **Marks, R. A.**, Uchikoshi, Y., Kovelman, I., & Hoeft, F. (2021). Decoding the role of the cerebellum in the early stages of reading acquisition. *Cortex*, *14*, 262-279. https://doi.org/10.1016/j.cortex.2021.02.033
- 19. **Marks, R. A.**, Kovelman, I., Kepinska, O., Oliver, M., Xia, Z., Haft, S. L., Zekelman, L., Duong, P., Uchikoshi, Y., Hancock, R., & Hoeft, F. (2019). Spoken language processing predicts print-speech convergence in beginning readers. *NeuroImage*, 201, 116021. https://doi.org/10.1016/j.neuroimage.2019.116021
- 20. Ip, K.[†], **Marks, R. A.**[†], Hsu, L.-S., Desai, N., Kuan, J. L., Tardif, T., & Kovelman, I. (2019). Morphological processing in Chinese engages left temporal regions. *Brain and Language*, *199*, 104696. https://doi.org/10.1016/j.bandl.2019.104696
- 21. Kovelman, I., & **Marks**, **R. A.** (2019). Tracking qualitative changes in cognition and brain development through bilingualism. *Journal of Neurolinguistics*, 49, 255-257. https://doi.org/10.1016/j.ineuroling.2018.06.002

BOOK CHAPTERS

- 1. **Marks, R. A.**, Satterfield, T., & Kovelman, I. (2022). Integrated multilingualism and bilingual reading development. In J. MacSwan (Ed.), *Multilingual Perspectives on Translanguaging* (pp. 201-223). Bristol, UK: Multilingual Matters.
- 2. Morrison, F. J., & Marks, R. A., Woods, A. D., & Connor, C. M. (2020). Literacy. In Byrne, C., & Suriyan, S. (Eds.), *Encyclopedia of Infant and Early Childhood Development*, 2nd Edition, Vol. 2 (pp. 260-272). Elsevier. https://dx.doi.org/10.1016/B978-0-12-809324-5.05837-5
- 3. Morrison, F. J., Connor, C. M., Woods, A. D. & Marks, R. A. (2019). Language, literacy, and the transition to American schooling. In D. Whitebread (Ed.), *The SAGE Handbook of Developmental Psychology and Early Childhood Education* (pp. 418-434). Cambridge: SAGE Publications Ltd.

REBECCA A. MARKS

PUBLIC DATA

Sun, X., Zhang, K., **Marks, R. A.,** Karas, Z., Eggleston, R. L., Nickerson, N., Yu, C.-L., Wagley, N., Hu, X.-S., Chou, T.-L., Satterfield, T., Tardif, T., & Kovelman, I. (2022). Morphological and phonological processing in English monolingual, Chinese-English bilingual, and Spanish-English bilingual children: An fNIRS neuroimaging dataset. *Data in Brief*, *42*(June 2022). https://doi.org/10.1016/j.dib.2022.108048



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SELECT HONORS & AWARDS

Rebecca L. Sandak Young Investigator Award, Society for the Scientific Study of Reading	2024
Postdoctoral Fellowship Award, Cognitive Neuroscience Society (CNS)	2024
ProQuest Distinguished Dissertation Award, ProQuest Information Services	2021
Stanley E. and Ruth B. Dimond Best Dissertation Award, U-M School of Education	2021
Outstanding Graduate Student Instructor Award, Rackham Graduate School	2021

SELECT CONFERENCE PRESENTATIONS

*Student mentee

- Marks, R. A., Eggleston, R., Gabrieli, J. D. E., Christodoulou, J. A., & Kovelman, I. (2024, July). Brain bases of morphological awareness relate to reading (dis)ability over time. In R. Marks (Chair), Brain and (Neuro)cognition. Symposium delivered at the annual meeting of the annual meeting of the Scientific Study of Reading (SSSR), Copenhagen, Denmark.
- Marks, R. A., Sun, X., Caballero, J., Bouhali, F., Kepinska, O., Beltz, A., Gabrieli, J. D. E., Christodoulou, J., Hoeft, F., & Kovelman, I. (2024, April). *Individual differences in the emerging reading network: A GIMME investigation of functional connectivity in beginning readers.* Poster to be presented at the Cognitive Neuroscience Society (CNS), Toronto, ON, Canada.
- Thesken, H.*, **Marks, R. A.**, Azor, A. M., Wade, K., Norton, R. T., Gabrieli, J. D. E., & Christodoulou, J. (2024, April). *Brain-behavior correlates of working memory in typical reading and dyslexia*. Poster to be presented at the Cognitive Neuroscience Society (CNS), Toronto, ON, Canada.
- Marks, R. A., Pollack, C., D'Mello, A., Meisler, S., Gabrieli, J. D. E., & Christodoulou, J. A. (2022, July). *Does math matter? Exploring the neuro-behavioral correlates of phonological processing in readers with dyslexia, with and without comorbid math disorder.* Poster presented at the International Mind Brain & Education Society (IMBES), Montréal, QC, Canada.
- McAlister-López, E.*, **Marks, R. A.,** Eggleston, R., & Kovelman, I. (2022, July). *Updating literacy models for bilingual children: Morphological awareness and cross-linguistic interaction in English and Spanish reading.* Poster presented at the International Mind Brain & Education Society (IMBES), Montréal, QC, Canada.
- **Marks, R. A.**, Labotka, D., & Kovelman, I. (2021, July). *The Early Lexical Morphology Measure (ELMM): Morphological awareness contributes to early English reading*. Poster presented at the International Association for the Study of Child Language (IASCL) Conference, Virtual.

REBECCA A. MARKS

Marks, R. A., Labotka, D., Sun, X., Nickerson, N., Zhang, K., Eggleston, R., Yu, C.-L., Uchikoshi, Y., Hoeft, F., & Kovelman, I. (2021, July). *Morphological awareness in English reading: A comparative study of English monolinguals, Spanish-English bilinguals, and Chinese-English bilinguals.* In I. Kovelman (Chair), *Bilingual reading development: Cross-linguistic & neuro-behavioral perspectives.* Symposium delivered at the annual meeting of the annual meeting of the Society for the Scientific Study of Reading (SSSR), Virtual.

- Marks, R. A., Labotka, D., Uchikoshi, Y., Hoeft, F. & Kovelman, I. (2020, July). Morphological awareness in English reading: A comparative study of English monolinguals, Spanish-English bilinguals, and Chinese-English bilinguals. In I. Kovelman (Chair), *Bilingual reading development: Cross-linguistic & neuro-behavioral perspectives*. Symposium delivered at the annual meeting of the annual meeting of the Society for the Scientific Study of Reading (SSSR), Newport Beach, CA. (Conference canceled due to COVID-19)
- Marks, R. A., Labotka, D., & Kovelman, I. (2020, July). *The Early Lexical Morphology Measure (ELMM): Morphological awareness contributes to early English reading*. Poster to be presented at the 15th Congress of the International Association for the Study of Child Language (IASCL), Philadelphia, PA. (Conference canceled due to COVID-19)
- Marks, R. A., Eickholt, L.*, Bouhali, F., Kepinska, O., Vukovic, N., Caballero, J., Oliver, M., Hancock, R., Uchikoshi, Y., Kovelman, I, & Hoeft, F. (2020, March). *Functional connectivity for print and speech processing in emerging readers*. Data blitz talk presented virtually at the annual meeting of the Cognitive Neuroscience Society (CNS), Boston, MA.
- Eickholt, L.*, **Marks, R. A.**, Bouhali, F., Kepinska, O., Vukovic, N., Caballero, J., Oliver, M., Hancock, R., Uchikoshi, Y., Kovelman, I, & Hoeft, F. (2020, March). *Functional connectivity for print and speech processing in emerging readers*. Poster presented virtually at the annual meeting of the Cognitive Neuroscience Society (CNS), Boston, MA.
- **Marks, R. A.**, Kovelman, I., & Hoeft, F. (2019, July). *Spoken language proficiency predicts brain development for literacy in beginning readers.* Paper presented at the annual meeting of the Society for the Scientific Study of Reading (SSSR), Toronto, ON, Canada.
- Kovelman, I., Ip, K., **Marks, R. A.**, & Tardif, T. (2019, April). Morphological awareness literacy task in Chinese engages left temporal regions An fMRI study. In I. Kovelman (Chair), *Phonological and morphological training evidence among children and adults: Bilingual approach to and empirical evidence from behavioral, developmental, and neuropsychological studies*. Symposium delivered at the annual meeting of the American Educational Research Association (AERA), Toronto, ON, Canada.
- Marks, R. A., Zekelman, L., Kepinska, O., Oliver, M., Haft, S. L., Xia, Z., Hancock, R., Uchikoshi, Y., Kovelman, I., & Hoeft, F. (2019, March). *Spoken language predicts print-speech spatial co-activation in 5-6 year old emerging readers*. Poster presented at the annual meeting of the Cognitive Neuroscience Society (CNS), San Francisco, CA.
- **Marks, R. A.**, Kovelman, I., & Hoeft, F. (2019, March). *Emerging functional connectivity of the reading brain*. Poster presented at the biennial meeting of the Society for Research in Child Development (SRCD), Baltimore, MD.

REBECCA A. MARKS

Marks, R. A., Kovelman, I., & Hoeft, F. (2018, July). Emerging brain network for reading in the first year of schooling. Poster presented at the annual meeting of the Society for the Scientific Study of Reading (SSSR), Brighton, United Kingdom.

- Marks, R. A., Xia, Z., Hancock, R., Uchikoshi, Y., Kovelman, I. & Hoeft, F. (2017, April). Brain basis of language proficiency in bilingual children. Poster presented at the biennial meeting of the Society for Research in Child Development (SRCD), Austin, TX.
- Marks, R. A., Xia, Z., Hancock, R., Uchikoshi, Y., Kovelman, I. & Hoeft, F. (2017, March). Bilingual knowledge associated with cortical responses during language processing. Poster presented at the annual meeting of the Cognitive Neuroscience Society (CNS), San Francisco, CA.
- Marks, R. A., Xia, Z., Wunsh, S. M., Uchikoshi, Y., Kovelman, I. & Hoeft, F. (2016, September). Brain basis of language proficiency in bilingual children: Pilot evidence from a longitudinal fMRI study. Poster presented at the meeting of the International Mind, Brain and Education Society (IMBES), Toronto, ON, Canada.
- Kovelman, I., Marks, R. A., Xia Z., Wunsh, S. M. Uchikoshi, Y. & Hoeft, F. (2016, September). The neurocognitive foundations of bilingual literacy. In I. Kovelman (Chair), Bilingualism, bilingual education, and the neural representation for learning to read. Symposium delivered at the meeting of the International Mind, Brain and Education Society (IMBES), Toronto, ON, Canada.

TEACHING

Graduate Courses

Reading Difficulties Across Diverse Learners, Harvard Graduate School of Education Educational Psychology, Accelerated M.A. with Secondary Teacher Certification, University of Michigan

Undergraduate Courses

Introduction to Developmental Psychology, *University of Michigan* Educational Psychology & Human Development (Elementary), University of Michigan Educational Psychology & Human Development (Secondary), University of Michigan

K-12 Teaching

7th Grade Mathematics, *Teach for America – St. Louis*

MENTORED UNDERGRADUATE RESEARCH

Senior Theses

Eva McAlister López (Honors Thesis in Psychology, University of Michigan) 2022 Cross-Linguistic Transfer of Morphological Awareness in Spanish-English Bilinguals * Winner of Federation of Associations in Behavioral and Brain Sciences (FABBS) Undergraduate Research Excellence National Award; Lorraine Nadelman Honors Thesis Award in Developmental

Psychology; & Edward C. Chang Undergraduate Research Diversity Award

Lynn Eickholt (Thesis in Neuroscience, University of Michigan) The Role of the Arcuate Fasciculus in Learning to Read

2021

Sylvia Gisler (Honors Thesis in Psychology, University of Michigan) 2020 Developing Morphological Awareness: Predictive Characteristics of Production Errors * Winner of Lorraine Nadelman Honors Thesis Award in Developmental Psychology

Poster Presentations

*Student mentee

- Rhorer, H.*, **Marks, R. A.**, Meisler, S., Thesken, H., Gabrieli, J. D. E., & Christodoulou, J. A. (2023, April). *Comparing white matter tracts in ADHD and dyslexia*. Poster presented at the Ruhlman Conference at Wellesley College.
- Cohen, M.*, **Marks, R. A.**, Gabrieli, J. D. E. (2022, August). *The bar in my barber's bar mitzvah: Examining differences in morphological processing between typical and dyslexic readers.* Poster presented at the Boston University Research in Science & Engineering (RISE) Summer Poster Session.
- McAlister López, E.*, **Marks, R.** A., Eggleston, R., & Kovelman, I. (2022, April). *How do a bilingual's two languages interact? Cross-linguistic transfer of morphological awareness in Spanish-English bilinguals.* Poster presented at the 2021 Psychology Undergraduate Research Forum.
- McAlister López, E.*, **Marks, R. A.**, & Kovelman, I. (2021, April). *How do a bilingual's two languages interact? Cross-linguistic transfer of morphological awareness in Spanish-English bilinguals*. Poster presented at the 2021 Virtual Psychology Undergraduate Research Forum.
- Eickholt, L.*, **Marks, R. A.**, Kovelman, I, & Hoeft, F. (2021, April). *Exploring the role of the arcuate fasciculus (AF) in early reading development*. Poster presented virtually at the Annual Undergraduate Research Symposium.
- Gisler, S.*, **Marks, R. A.,** & Kovelman, I. (2020, April). *Developing morphological awareness: Predictive characteristics of production errors.* Poster presented virtually at the Psychology Undergraduate Virtual Research Forum, Ann Arbor, MI.
- Fernandez, A.*, Nickerson, N., **Marks, R. A.,** & Kovelman, I. (2019, August). *Morphological awareness and the home language environment of Spanish-English bilingual learners*. Poster presented at the Michigan Summer Program in Cognition and Early Development (MSPICED) Poster Fair, Ann Arbor, MI.
- Eickholt, L.*, **Marks, R. A.**, Kovelman, I, & Hoeft, F. (2019, May). *Functional connectivity of the visual word form area (VWFA)*. Poster presented at the 28th Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.
- Eickholt, L.*, Puzycki, S*, Ennis, M.*, **Marks, R. A.**, & Kovelman, I. (2018, April). *Development of the visual word form area (VWFA) in emergent readers*. Poster presented at the Undergraduate Research Opportunity Program (UROP) Research Fair, Ann Arbor, MI.
- Ennis, M.*, Puzycki, S.*, Eickholt, L.*, **Marks, R. A.**, & Kovelman, I. (2018, April). *Bilingual literacy development in the brain*. Poster presented at the Undergraduate Research Opportunity Program (UROP) Research Fair, Ann Arbor, MI.
- Capodilupo, L.*, Johnson, K.*, Breeden, K.*, Unger, E.*, **Marks, R. A.**, & Morrison, F.J. (2017, April). *Children's self-regulation in the classroom*. Poster presented at the Undergraduate Research Opportunity Program (UROP) Research Fair, Ann Arbor, MI.

SPECIALIZED TRAINING

REBECCA A. MARKS

UM Graduate Teaching Certificate, Center for Research on Learning and Teaching	2021
Preparing Future Faculty Seminar, Center for Research on Learning and Teaching	2021
AFNI (Analysis of Functional NeuroImages) Training Bootcamp, NIH/NIMH	2017
Summer Training Course in fMRI, University of Michigan	2016
Functional Near Infrared Spectroscopy Training Course, MGH Martinos Center for	2015
Biomedical Engineering	

SERVICE & INVOLVEMENT

Peer review for: Applied Psycholinguistics, Cerebral Cortex, Child Development, Child Development Perspectives, Developmental Cognitive Neuroscience, Developmental Science, Dyslexia, Frontiers in Neuroscience, Human Brain Mapping, International Journal of Bilingualism, Journal of Education, NeuroImage, Psicologia: Reflexão e Crítica, Scientific Studies of Reading

Diversity Committee, Combined Program in Education and Psychology	2020 - 2021
Remote Teaching Advisory Group, Center for Research in Learning and Teaching	
School of Education Executive Committee	2019 - 2021
Hiring Committee, Combined Program in Education and Psychology	
Graduate Admissions, Combined Program in Education and Psychology	2018
Combined Program in Education and Psychology Executive Committee	2016
Michigan Association of Psychology Scholars (MAPS)	2015 - 2019
Steering Committee Member (2018–2019); Undergraduate Mentor (2015–2018)	
Graduate Recruitment Committee, Combined Program in Education and Psychology	2015 - 2018
Co-chair (Winter 2017, Winter 2018); Member (2015–2016)	
Alumni and Parents Admission Program (APAP), Washington University in St. Louis	2015 - 2017

PROFESSIONAL AFFILIATIONS

Cognitive Neuroscience Society (CNS)

International Mind, Brain, and Education Society (IMBES)

Society for Research in Child Development (SRCD)

Society for the Scientific Study of Reading (SSSR)