**Supplementary Table 1 Studies included for evaluation of temporal cortical terminations of the arcuate fasciculus**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Study** | **Method** | **Year** | **Sample size** | **Frontal cortical terminations** | **Temporal Cortical terminations** | **Reconstruction method** | **Condition (healthy, neurodegenerative, cerebrovascular, oncological, epilepsy)** |
| 1 | Silva LL, transcranial magnetic stimulation (rTMS)-based, and rTMS-enhanced diffusion tensor imaging-fiber tracking. J Neurosurg. 2021 Jul 30:1-12. doi: 10.3171/2020.12.JNS204028. Epub ahead of print. PMID: 34330091. | Tractography | 2021 | 30 |  | STG, VATL | DTI | Oncological |
| 2 | Ivanova MV, Zhong A, Turken A, Baldo JV, Dronkers NF. Functional Contributions of the Arcuate Fasciculus to Language Processing. Front Hum Neurosci. 2021 Jun 25;15:672665. doi: 10.3389/fnhum.2021.672665. PMID: 34248526; PMCID: PMC8267805. | Tractography | 2021 | 33 | pTRI, orbitofrontal | STG, MTG, PITG, VATL | HARDI | Cerebrovascolar |
| 3 | Giampiccolo D, Parmigiani S, Basaldella F, Russo S, Pigorini A, Rosanova M, Cattaneo L, Sala F. Recording cortico-cortical evoked potentials of the human arcuate fasciculus under general anaesthesia. Clin Neurophysiol. 2021 Aug;132(8):1966-1973. doi: 10.1016/j.clinph.2021.03.044. Epub 2021 May 1. PMID: 34119407. | CCEPs | 2021 | 9 | vPM, pOP, pTRI | MTG |  |  |
| 4 | Giampiccolo D, Parmigiani S, Basaldella F, Russo S, Pigorini A, Rosanova M, Cattaneo L, Sala F. Recording cortico-cortical evoked potentials of the human arcuate fasciculus under general anaesthesia. Clin Neurophysiol. 2021 Aug;132(8):1966-1973. doi: 10.1016/j.clinph.2021.03.044. Epub 2021 May 1. PMID: 34119407. | Tractography | 2021 | 9 | vPM, dorsal laryngeal motor area, pOP, pTRI | STG,MTG,ITG, VATL | HARDI | Oncological |
| 5 | Lumaca M, Baggio G, Vuust P. White matter variability in auditory callosal pathways contributes to variation in the cultural transmission of auditory symbolic systems. Brain Struct Funct. 2021 Jul;226(6):1943-1959. doi: 10.1007/s00429-021-02302-y. Epub 2021 May 29. PMID: 34050791. | Tractography | 2021 | 51 |  | STG | HARDI | Healthy |
| 6 | Briggs RG, Tanglay O, Dadario NB, Young IM, Fonseka RD, Hormovas J, Dhanaraj V, Lin YH, Kim SJ, Bouvette A, Chakraborty AR, Milligan TM, Abraham CJ, Anderson CD, O'Donoghue DL, Sughrue ME. The Unique Fiber Anatomy of Middle Temporal Gyrus Default Mode Connectivity. Oper Neurosurg (Hagerstown). 2021 Jun 15;21(1):E8-E14. doi: 10.1093/ons/opab109. PMID: 33929019; PMCID: PMC8203421. | Dissection | 2021 | 10 | MFG, pTRI | MTG |  |  |
| 7 | Briggs RG, Tanglay O, Dadario NB, Young IM, Fonseka RD, Hormovas J, Dhanaraj V, Lin YH, Kim SJ, Bouvette A, Chakraborty AR, Milligan TM, Abraham CJ, Anderson CD, O'Donoghue DL, Sughrue ME. The Unique Fiber Anatomy of Middle Temporal Gyrus Default Mode Connectivity. Oper Neurosurg (Hagerstown). 2021 Jun 15;21(1):E8-E14. doi: 10.1093/ons/opab109. PMID: 33929019; PMCID: PMC8203421. | Tractography | 2021 | 10 | pOP | MTG, VATL | DSI | Healthy |
| 8 | Martinez Oeckel A, Rijntjes M, Glauche V, Kümmerer D, Kaller CP, Egger K, Weiller C. The extreme capsule and aphasia: proof-of-concept of a new way relating structure to neurological symptoms. Brain Commun. 2021 Mar 14;3(2):fcab040. doi: 10.1093/braincomms/fcab040. PMID: 33870191; PMCID: PMC8042249. | Tractography | 2021 | 123 | vPM, dorsal laryngeal motor area, pOP, pTRI | STG,MTG,VATL | Global Tracking | Cerebrovascolar |
| 9 | Briggs RG, Lin YH, Dadario NB, Kim SJ, Young IM, Bai MY, Dhanaraj V, Fonseka RD, Hormovas J, Tanglay O, Chakraborty AR, Milligan TM, Abraham CJ, Anderson CD, Palejwala AH, Conner AK, O'Donoghue DL, Sughrue ME. Anatomy and White Matter Connections of the Middle Frontal Gyrus. World Neurosurg. 2021 Jun;150:e520-e529. doi: 10.1016/j.wneu.2021.03.045. Epub 2021 Mar 17. PMID: 33744423. | Tractography | 2021 | 10 | MFG, pTRI | MTG, PITG, | DSI | Healthy |
| 10 | Latini F, Trevisi G, Fahlström M, Jemstedt M, Alberius Munkhammar Å, Zetterling M, Hesselager G, Ryttlefors M. New Insights Into the Anatomy, Connectivity and Clinical Implications of the Middle Longitudinal Fasciculus. Front Neuroanat. 2021 Jan 29;14:610324. doi: 10.3389/fnana.2020.610324. PMID: 33584207; PMCID: PMC7878690. | Tractography | 2021 | 24 | pOP | STG,MTG,PITG,VATL | Generalised Q-sampling imaging | Healthy |
| 11 | Giampiccolo D, Howells H, Bährend I, Schneider H, Raffa G, Rosenstock T, Vergani F, Vajkoczy P, Picht T. Preoperative transcranial magnetic stimulation for picture naming is reliable in mapping segments of the arcuate fasciculus. Brain Commun. 2020 Sep 29;2(2):fcaa158. doi: 10.1093/braincomms/fcaa158. PMID: 33543136; PMCID: PMC7846168. | Tractography | 2021 | 30 | vPM, dorsal laryngeal motor area, pOP, pTRI | STG, MTG | HARDI | Oncological |
| 12 | Wang Y, Wang X, Shi H, Xia L, Dong J, Nguchu BA, Uwisengeyimana JD, Liu Y, Zhang D, Feng L, Qiu B. Microstructural properties of major white matter tracts in constant exotropia before and after strabismus surgery. Br J Ophthalmol. 2021 Jan 19:bjophthalmol-2020-317948. doi: 10.1136/bjophthalmol-2020-317948. Epub ahead of print. PMID: 33468491. | Tractography | 2021 | 19 | vPM, pOP | STG,MTG,ITG, VATL | HARDI | Neurodevelopmental |
| 13 | Vaquero L, Ramos-Escobar N, Cucurell D, François C, Putkinen V, Segura E, Huotilainen M, Penhune V, Rodríguez-Fornells A. Arcuate fasciculus architecture is associated with individual differences in pre-attentive detection of unpredicted music changes. Neuroimage. 2021 Apr 1;229:117759. doi: 10.1016/j.neuroimage.2021.117759. Epub 2021 Jan 14. PMID: 33454403. | Tractography | 2021 | 24 | vPM, pOP | STG, MTG | DTI | Healthy |
| 14 | Tuncer MS, Salvati LF, Grittner U, Hardt J, Schilling R, Bährend I, Silva LL, Fekonja LS, Faust K, Vajkoczy P, Rosenstock T, Picht T. Towards a tractography-based risk stratification model for language area associated gliomas. Neuroimage Clin. 2021;29:102541. doi: 10.1016/j.nicl.2020.102541. Epub 2020 Dec 25. PMID: 33401138; PMCID: PMC7785953. | Tractography | 2021 | 50 |  | STG,MTG,ITG, VATL | DTI | Oncological |
| 15 | Dziedzic TA, Bala A, Marchel A. Cortical and Subcortical Anatomy of the Parietal Lobe From the Neurosurgical Perspective. Front Neurol. 2021 Aug 26;12:727055. doi: 10.3389/fneur.2021.727055. PMID: 34512535; PMCID: PMC8426580. | Dissection | 2021 | 5 | pTRI | MTG, pITG |  |  |
| 16 | Egemen E, Celtikci P, Dogruel Y, Yakar F, Sahinoglu D, Farouk M, Adiguzel E, Ugur HC, Coskun E, Güngör A. Microsurgical and Tractographic Anatomical Study of Transtemporal-Transchoroidal Fissure Approaches to the Ambient Cistern. Oper Neurosurg (Hagerstown). 2021 Jan 13;20(2):189-197. doi: 10.1093/ons/opaa272. PMID: 33313862. | Dissection | 2021 | 8 | dorsal laryngeal motor area, pOP, pTRI, orbitofrontal cortex | STG, MTG |  |  |
| 17 | Baran O, Balak N, Baydin S, Aydin I, Kayhan A, Evran S, Kemerdere R, Tanriover N. Assessing the connectional anatomy of superior and lateral surgical approaches for medial temporal lobe epilepsy. J Clin Neurosci. 2020 Nov;81:378-389. doi: 10.1016/j.jocn.2020.10.016. Epub 2020 Oct 22. PMID: 33222947. | Dissection | 2021 | 8 | vPM, pOP, pTRI | STG, MTG, ITG, vATL |  |  |
| 18 | Yamao Y, Matsumoto R, Kunieda T, Nakae T, Nishida S, Inano R, Shibata S, Kikuchi T, Arakawa Y, Yoshida K, Ikeda A, Miyamoto S. Effects of propofol on cortico-cortical evoked potentials in the dorsal language white matter pathway. Clin Neurophysiol. 2021 Aug;132(8):1919-1926. doi: 10.1016/j.clinph.2021.04.021. Epub 2021 Jun 1. PMID: 34182277. | CCEPs | 2021 | 14 | pOP, pTRI, MFG | STG, MTG |  |  |
| 19 | Forkel SJ, Rogalski E, Drossinos Sancho N, D'Anna L, Luque Laguna P, Sridhar J, Dell'Acqua F, Weintraub S, Thompson C, Mesulam MM, Catani M. Anatomical evidence of an indirect pathway for word repetition. Neurology. 2020 Feb 11;94(6):e594-e606. doi: 10.1212/WNL.0000000000008746. Epub 2020 Jan 29. PMID: 31996450; PMCID: PMC7136066. | Tractography | 2020 | 30 | vPM, pOP | STG,MTG | DTI | Neurodegenerative |
| 20 | David S, Heesink L, Geuze E, Gladwin T, van Honk J, Kleber R, Leemans A. Regions of white matter abnormalities in the arcuate fasciculus in veterans with anger and aggression problems. Brain Struct Funct. 2020 May;225(4):1401-1411. doi: 10.1007/s00429-019-02016-2. Epub 2019 Dec 27. PMID: 31883025; PMCID: PMC7271041. | Tractography | 2020 | 59 | vPM | STG,MTG | DTI | Neurodegenerative |
| 21 | Dooley N, O'Hanlon E, Healy C, Adair A, McCandless C, Coppinger D, Kelleher I, Clarke M, Leemans A, Frodl T, Cannon M. Psychotic experiences in childhood are associated with increased structural integrity of the left arcuate fasciculus - A population-based case-control study. Schizophr Res. 2020 Jan;215:378-384. doi: 10.1016/j.schres.2019.08.022. Epub 2019 Sep 5. PMID: 31495700. | Tractography | 2020 | 50 | pOP, pTRI | STG, MTG,pITG | HARDI | Neurodevelopmental |
| 22 | Ikuta T, Gollnick HM, Rutledge AN. Age associated decline in the arcuate fasciculus and IQ. Brain Imaging Behav. 2020 Apr;14(2):362-367. doi: 10.1007/s11682-019-00154-z. Erratum in: Brain Imaging Behav. 2019 Aug 3;: PMID: 31286384. | Tractography | 2020 | 491 | pTRI | STG | DTI | Neurodegenerative |
| 23 | Barbeau EB, Klein D, Soulières I, Petrides M, Bernhardt B, Mottron L. Age of Speech Onset in Autism Relates to Structural Connectivity in the Language Network. Cereb Cortex Commun. 2020 Oct 23;1(1):tgaa077. doi: 10.1093/texcom/tgaa077. PMID: 34296136; PMCID: PMC8152885. | Tractography | 2020 | 28 | pOP | STG, MTG | DTI | Neurodevelopmental |
| 24 | Jeon HA, Kuhl U, Friederici AD. Mathematical expertise modulates the architecture of dorsal and cortico-thalamic white matter tracts. Sci Rep. 2019 May 2;9(1):6825. doi: 10.1038/s41598-019-43400-6. PMID: 31048754; PMCID: PMC6497695. | Tractography | 2020 | 38 | pOP, MFG | STG, MTG | DTI | Healthy |
| 25 | Oestreich LKL, Randeniya R, Garrido MI. Auditory white matter pathways are associated with effective connectivity of auditory prediction errors within a fronto-temporal network. Neuroimage. 2019 Jul 15;195:454-462. doi: 10.1016/j.neuroimage.2019.04.008. Epub 2019 Apr 5. PMID: 30959193. | Tractography | 2020 | 89 | vPM, pOP | STG, MTG | HARDI | Healthy |
| 26 | Yeh FC. Shape analysis of the human association pathways. Neuroimage. 2020 Dec;223:117329. doi: 10.1016/j.neuroimage.2020.117329. Epub 2020 Sep 1. PMID: 32882375; PMCID: PMC7775618. | Tractography | 2020 | 20 | vPM, pOP, pTRI | STG,MTG,ITG, VATL | Generalised Q-sampling imaging | Healthy |
| 27 | Lin YH, Young IM, Conner AK, Glenn CA, Chakraborty AR, Nix CE, Bai MY, Dhanaraj V, Fonseka RD, Hormovas J, Tanglay O, Briggs RG, Sughrue ME. Anatomy and White Matter Connections of the Inferior Temporal Gyrus. World Neurosurg. 2020 Nov;143:e656-e666. doi: 10.1016/j.wneu.2020.08.058. Epub 2020 Aug 14. PMID: 32798785. | Tractography | 2020 | 10 | vPM, pOP, pTRI, MFG | ITG, VATL | DSI | Healthy |
| 28 | Rosenstock T, Picht T, Schneider H, Vajkoczy P, Thomale UW. Pediatric navigated transcranial magnetic stimulation motor and language mapping combined with diffusion tensor imaging tractography: clinical experience. J Neurosurg Pediatr. 2020 Jul 24:1-11. doi: 10.3171/2020.4.PEDS20174. Epub ahead of print. PMID: 32707554. | Tractography | 2020 | 10 | vPM, dorsal laryngeal motor area, pOP, pTRI, orbitofrontal | STG,MTG,ITG,VATL | DTI | Oncological |
| 29 | Falkenberg LE, Westerhausen R, Johnsen E, Kroken R, Løberg EM, Beresniewicz J, Kazimierczak K, Kompus K, Ersland L, Sandøy LB, Hugdahl K. Hallucinating schizophrenia patients have longer left arcuate fasciculus fiber tracks: a DTI tractography study. Psychiatry Res Neuroimaging. 2020 Aug 30;302:111088. doi: 10.1016/j.pscychresns.2020.111088. Epub 2020 May 22. PMID: 32480045. | Tractography | 2020 | 66 | vPM, pOP, pTRI | STG,MTG | DTI | Neurodevelopmental |
| 30 | Barbeau EB, Descoteaux M, Petrides M. Dissociating the white matter tracts connecting the temporo-parietal cortical region with frontal cortex using diffusion tractography. Sci Rep. 2020 May 18;10(1):8186. doi: 10.1038/s41598-020-64124-y. PMID: 32424290; PMCID: PMC7235086. | Tractography | 2020 | 50 | dorsal larygeal motor area, pOP, pTRI | STG,MTG,PITG | HARDI | Healthy |
| 31 | Muftah Lahirish IA, Middlebrooks EH, Holanda VM, Batista-Quintero R, Maeda FL, Neto MR, Parraga RG, de Olivieira E. Comparison Between Transcortical and Interhemispheric Approaches to the Atrium of Lateral Ventricle Using Combined White Matter Fiber Dissections and Magnetic Resonance Tractography. World Neurosurg. 2020 Jun;138:e478-e485. doi: 10.1016/j.wneu.2020.02.161. Epub 2020 Mar 6. PMID: 32147552. | Dissection | 2020 | 10 | vPM, pOP | MTG, pITG, vATL |  |  |
| 32 | Fernández L, Velásquez C, García Porrero JA, de Lucas EM, Martino J. Heschl's gyrus fiber intersection area: a new insight on the connectivity of the auditory-language hub. Neurosurg Focus. 2020 Feb 1;48(2):E7. doi: 10.3171/2019.11.FOCUS19778. PMID: 32006945. | Dissection | 2020 | 4 |  | MTG |  |  |
| 33 | Kalyvas A, Koutsarnakis C, Komaitis S, Karavasilis E, Christidi F, Skandalakis GP, Liouta E, Papakonstantinou O, Kelekis N, Duffau H, Stranjalis G. Mapping the human middle longitudinal fasciculus through a focused anatomo- imaging study: shifting the paradigm of its segmentation and connectivity pattern. Brain Struct Funct. 2020 Jan;225(1):85-119. doi: 10.1007/s00429-019-01987-6. Epub 2019 Nov 26. PMID: 31773331. | Dissection | 2020 | 11 |  | STG |  |  |
| 34 | Filipiak P, Almairac F, Papadopoulo T, Fontaine D, Mondot L, Chanalet S, Deriche R, Clerc M, Wassermann D. Towards linking diffusion MRI based macro- and microstructure measures with cortico-cortical transmission in brain tumor patients. Neuroimage. 2021 Feb 1;226:117567. doi: 10.1016/j.neuroimage.2020.117567. Epub 2020 Nov 20. PMID: 33221443. | CCEPs | 2020 | 9 | vPM, pOP | STG, MTG |  |  |
| 35 | Silverstein BH, Asano E, Sugiura A, Sonoda M, Lee MH, Jeong JW. Dynamic tractography: Integrating cortico-cortical evoked potentials and diffusion imaging. Neuroimage. 2020 Jul 15;215:116763. doi: 10.1016/j.neuroimage.2020.116763. Epub 2020 Apr 12. PMID: 32294537; PMCID: PMC7292749. | CCEPs | 2020 | 10 | vPM, pOP, pTRI | STG, MTG, pITG, vATL |  | Epilepsy |
| 36 | Nakae T, Matsumoto R, Kunieda T, Arakawa Y, Kobayashi K, Shimotake A, Yamao Y, Kikuchi T, Aso T, Matsuhashi M, Yoshida K, Ikeda A, Takahashi R, Lambon Ralph MA, Miyamoto S. Connectivity Gradient in the Human Left Inferior Frontal Gyrus: Intraoperative Cortico-Cortical Evoked Potential Study. Cereb Cortex. 2020 Jun 30;30(8):4633-4650. doi: 10.1093/cercor/bhaa065. PMID: 32232373; PMCID: PMC7325718. | CCEPs | 2020 | 14 | pOP, pTRI, pORB | STG, MTG, pITG, vATL |  |  |
| 37 | Sugiura A, Silverstein BH, Jeong JW, Nakai Y, Sonoda M, Motoi H, Asano E. Four-dimensional map of direct effective connectivity from posterior visual areas. Neuroimage. 2020 Apr 15;210:116548. doi: 10.1016/j.neuroimage.2020.116548. Epub 2020 Jan 17. PMID: 31958582; PMCID: PMC7054169. | CCEPs | 2020 | 9 | pTRI, MFG | pITG |  | Epilepsy |
| 38 | Gayoso S, Perez-Borreda P, Gutierrez A, García-Porrero JA, Marco de Lucas E, Martino J. Ventral Precentral Fiber Intersection Area: A Central Hub in the Connectivity of Perisylvian Associative Tracts. Oper Neurosurg (Hagerstown). 2019 Aug 1;17(2):182-192. doi: 10.1093/ons/opy331. PMID: 30418653. | Dissection | 2019 | 4 | pOP, vPM | STG, MTG, ITG, vATL |  |  |
| 39 | Gayoso S, Perez-Borreda P, Gutierrez A, García-Porrero JA, Marco de Lucas E, Martino J. Ventral Precentral Fiber Intersection Area: A Central Hub in the Connectivity of Perisylvian Associative Tracts. Oper Neurosurg (Hagerstown). 2019 Aug 1;17(2):182-192. doi: 10.1093/ons/opy331. PMID: 30418653. | Tractography | 2019 | 4 | pOP, vPM | MTG | DTI | Healthy |
| 40 | Zacà D, Corsini F, Rozzanigo U, Dallabona M, Avesani P, Annicchiarico L, Zigiotto L, Faraca G, Chioffi F, Jovicich J, Sarubbo S. Whole-Brain Network Connectivity Underlying the Human Speech Articulation as Emerged Integrating Direct Electric Stimulation, Resting State fMRI and Tractography. Front Hum Neurosci. 2018 Oct 11;12:405. doi: 10.3389/fnhum.2018.00405. PMID: 30364298; PMCID: PMC6193478. | Tractography | 2019 | 7 | vPM, pOP | STG | DTI | Oncological |
| 41 | Capilla-Guasch P, Quilis-Quesada V, Regin-Neto M, Holanda VM, González- Darder JM, de Oliveira E. White Matter Relationships Examined by Transillumination Technique Using a Lateral Transcortical Parietal Approach to the Atrium: Three-Dimensional Images and Surgical Considerations. World Neurosurg. 2019 Dec;132:e783-e794. doi: 10.1016/j.wneu.2019.08.018. Epub 2019 Aug 12. PMID: 31415888. | Dissection | 2019 | 14 | pTRI | STG, MTG, pITG |  |  |
| 42 | Di Carlo DT, Benedetto N, Duffau H, Cagnazzo F, Weiss A, Castagna M, Cosottini M, Perrini P. Microsurgical anatomy of the sagittal stratum. Acta Neurochir (Wien). 2019 Nov;161(11):2319-2327. doi: 10.1007/s00701-019-04019-8. Epub 2019 Jul 30. PMID: 31363919. | Dissection | 2019 | 5 |  | STG, MTG, vATL |  |  |
| 43 | Briggs RG, Chakraborty AR, Anderson CD, Abraham CJ, Palejwala AH, Conner AK, Pelargos PE, O'Donoghue DL, Glenn CA, Sughrue ME. Anatomy and white matter connections of the inferior frontal gyrus. Clin Anat. 2019 May;32(4):546-556. doi: 10.1002/ca.23349. Epub 2019 Feb 28. PMID: 30719769. | Dissection | 2019 | 10 | pOP, pTRI | MTG, vATL |  |  |
| 44 | Monroy-Sosa A, Jennings J, Chakravarthi S, Fukui MB, Celix J, Kojis N, Lindsay M, Walia S, Rovin R, Kassam A. Microsurgical Anatomy of the Vertical Rami of the Superior Longitudinal Fasciculus: An Intraparietal Sulcus Dissection Study. Oper Neurosurg (Hagerstown). 2019 Feb 1;16(2):226-238. doi: 10.1093/ons/opy077. PMID: 29873781. | Dissection | 2019 | 5 |  | STG, MTG, ITG |  |  |
| 45 | Takeyama H, Matsumoto R, Usami K, Nakae T, Kobayashi K, Shimotake A, Kikuchi T, Yoshida K, Kunieda T, Miyamoto S, Takahashi R, Ikeda A. Human entorhinal cortex electrical stimulation evoked short-latency potentials in the broad neocortical regions: Evidence from cortico-cortical evoked potential recordings. Brain Behav. 2019 Sep;9(9):e01366. doi: 10.1002/brb3.1366. Epub 2019 Jul 30. PMID: 31361093; PMCID: PMC6749511. | CCEPs | 2019 | 7 | pOP | pITG, vATL |  | Epilepsy |
| 46 | Huang Y, Hajnal B, Entz L, Fabó D, Herrero JL, Mehta AD, Keller CJ. Intracortical Dynamics Underlying Repetitive Stimulation Predicts Changes in Network Connectivity. J Neurosci. 2019 Jul 31;39(31):6122-6135. doi: 10.1523/JNEUROSCI.0535-19.2019. Epub 2019 Jun 10. PMID: 31182638; PMCID: PMC6668210. | CCEPs | 2019 | 5 |  | STG, MTG, vATL |  |  |
| 47 | Tremblay P, Perron M, Deschamps I, Kennedy-Higgins D, Houde JC, Dick AS, Descoteaux M. The role of the arcuate and middle longitudinal fasciculi in speech perception in noise in adulthood. Hum Brain Mapp. 2019 Jan;40(1):226-241. doi: 10.1002/hbm.24367. Epub 2018 Sep 12. PMID: 30277622; PMCID: PMC6865648. | Tractography | 2018 | 29 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG,MTG,pITG, VATL | HARDI | Healthy |
| 48 | Calamuneri A, Arrigo A, Mormina E, Milardi D, Cacciola A, Chillemi G, Marino S, Gaeta M, Quartarone A. White Matter Tissue Quantification at Low b-Values Within Constrained Spherical Deconvolution Framework. Front Neurol. 2018 Aug 28;9:716. doi: 10.3389/fneur.2018.00716. PMID: 30210438; PMCID: PMC6122130. | Tractography | 2018 | 13 | vPM, dorsal laryngeal motor area | STG, MTG | DTI/HARDI | Healthy |
| 49 | Talozzi L, Testa C, Evangelisti S, Cirignotta L, Bianchini C, Ratti S, Fantazzini P, Tonon C, Manners DN, Lodi R. Along-tract analysis of the arcuate fasciculus using the Laplacian operator to evaluate different tractography methods. Magn Reson Imaging. 2018 Dec;54:183-193. doi: 10.1016/j.mri.2018.08.013. Epub 2018 Aug 27. PMID: 30165094. | Tractography | 2018 | 29 | pOP, pTRI | STG, MTG | probabilistic ball-and- sticks model, HARDI | Healthy |
| 50 | Sydnor VJ, Rivas-Grajales AM, Lyall AE, Zhang F, Bouix S, Karmacharya S, Shenton ME, Westin CF, Makris N, Wassermann D, O'Donnell LJ, Kubicki M. A comparison of three fiber tract delineation methods and their impact on white matter analysis. Neuroimage. 2018 Sep;178:318-331. doi: 10.1016/j.neuroimage.2018.05.044. Epub 2018 May 19. PMID: 29787865; PMCID: PMC6481642. | Tractography | 2018 | 10 | vPM, pOP, pTRI | STG, MTG, ITG, vATL | HARDI | Healthy |
| 51 | Chen X, Zhao Y, Zhong S, Cui Z, Li J, Gong G, Dong Q, Nan Y. The lateralized arcuate fasciculus in developmental pitch disorders among mandarin amusics: left for speech and right for music. Brain Struct Funct. 2018 May;223(4):2013-2024. doi: 10.1007/s00429-018-1608-2. Epub 2018 Jan 10. PMID: 29322239. | Tractography | 2018 | 30 | pOP | STG,MTG | DTI | Neurodevelopmental |
| 52 | Misaghi E, Zhang Z, Gracco VL, De Nil LF, Beal DS. White matter tractography of the neural network for speech-motor control in children who stutter. Neurosci Lett. 2018 Mar 6;668:37-42. doi: 10.1016/j.neulet.2018.01.009. Epub 2018 Jan 5. PMID: 29309858; PMCID: PMC5839127. | Tractography | 2018 | 22 | pOP, vPM | STG, MTG | DTI | Neurodevelopmental |
| 53 | Sihvonen AJ, Ripollés P, Särkämö T, Leo V, Rodríguez-Fornells A, Saunavaara J, Parkkola R, Soinila S. Tracting the neural basis of music: Deficient structural connectivity underlying acquired amusia. Cortex. 2017 Dec;97:255-273. doi: 10.1016/j.cortex.2017.09.028. Epub 2017 Oct 10. PMID: 29100660. | Tractography | 2018 | 41 | vPM, pOP | STG, MTG | DTI | Cerebrovascular |
| 54 | Lee Masson H, Kang HM, Petit L, Wallraven C. Neuroanatomical correlates of haptic object processing: combined evidence from tractography and functional neuroimaging. Brain Struct Funct. 2018 Mar;223(2):619-633. doi: 10.1007/s00429-017-1510-3. Epub 2017 Sep 13. PMID: 28905126. | Tractography | 2018 | 39 | vPM, pOP, pTRI, MFG | MTG | HARDI | Healthy |
| 55 | Kepinska O, Lakke EAJF, Dutton EM, Caspers J, Schiller NO. The perisylvian language network and language analytical abilities. Neurobiol Learn Mem. 2017 Oct;144:96-101. doi: 10.1016/j.nlm.2017.07.003. Epub 2017 Jul 11. PMID: 28710000. | Tractography | 2018 | 42 | vPM | STG, MTG, pITG | DTI | Healthy |
| 56 | Verhaeghe A, Decramer T, Naets W, Van Paesschen W, van Loon J, Theys T. Posterior Quadrant Disconnection: A Fiber Dissection Study. Oper Neurosurg (Hagerstown). 2018 Jan 1;14(1):45-50. doi: 10.1093/ons/opx060. PMID: 29253283. | Dissection | 2018 | 10 |  | STG, MTG |  |  |
| 57 | Lin Y, Zhang K, Li S, Li S, Jin J, Jin F, Qin W, Hai L, Zhu M, Yu C, Liu Z, Yin T, Yang X. Relationship Between Perisylvian Essential Language Sites and Arcuate Fasciculus in the Left Hemisphere of Healthy Adults. Neurosci Bull. 2017 Dec;33(6):616-626. doi: 10.1007/s12264-017-0137-y. Epub 2017 May 13. PMID: 28501904; PMCID: PMC5725373. | Tractography | 2017 | 28 | vPM, pOP, dorsal laryngeal motor area | STG, MTG | DTI | Healthy |
| 58 | Salvan P, Tournier JD, Batalle D, Falconer S, Chew A, Kennea N, Aljabar P, Dehaene-Lambertz G, Arichi T, Edwards AD, Counsell SJ. Language ability in preterm children is associated with arcuate fasciculi microstructure at term. Hum Brain Mapp. 2017 Aug;38(8):3836-3847. doi: 10.1002/hbm.23632. Epub 2017 May 4. PMID: 28470961; PMCID: PMC5518442. | Tractography | 2017 | 43 | pOP | STG, MTG | HARDI | Neurodevelopmental |
| 59 | Burks JD, Boettcher LB, Conner AK, Glenn CA, Bonney PA, Baker CM, Briggs RG, Pittman NA, O'Donoghue DL, Wu DH, Sughrue ME. White matter connections of the inferior parietal lobule: A study of surgical anatomy. Brain Behav. 2017 Mar 8;7(4):e00640. doi: 10.1002/brb3.640. PMID: 28413699; PMCID: PMC5390831. | Tractography | 2017 | 10 | MFG | STG, MTG | Generalised Q-sampling imaging | Healthy |
| 60 | Yamao Y, Suzuki K, Kunieda T, Matsumoto R, Arakawa Y, Nakae T, Nishida S, Inano R, Shibata S, Shimotake A, Kikuchi T, Sawamoto N, Mikuni N, Ikeda A, Fukuyama H, Miyamoto S. Clinical impact of intraoperative CCEP monitoring in evaluating the dorsal language white matter pathway. Hum Brain Mapp. 2017 Apr;38(4):1977-1991. doi: 10.1002/hbm.23498. Epub 2017 Jan 23. PMID: 28112455; PMCID: PMC6866855. | CCEPs | 2017 | 20 | pOP, pTRI, MFG | STG, MTG, pITG |  | Oncological |
| 61 | Yamao Y, Suzuki K, Kunieda T, Matsumoto R, Arakawa Y, Nakae T, Nishida S, Inano R, Shibata S, Shimotake A, Kikuchi T, Sawamoto N, Mikuni N, Ikeda A, Fukuyama H, Miyamoto S. Clinical impact of intraoperative CCEP monitoring in evaluating the dorsal language white matter pathway. Hum Brain Mapp. 2017 Apr;38(4):1977-1991. doi: 10.1002/hbm.23498. Epub 2017 Jan 23. PMID: 28112455; PMCID: PMC6866855. | Tractography | 2017 | 13 | pOP, pTRI, MFG | STG,MTG,pITG,vATL | DTI | Oncological |
| 62 | Güngör A, Baydin S, Middlebrooks EH, Tanriover N, Isler C, Rhoton AL Jr. The white matter tracts of the cerebrum in ventricular surgery and hydrocephalus. J Neurosurg. 2017 Mar;126(3):945-971. doi: 10.3171/2016.1.JNS152082. Epub 2016 Jun 3. PMID: 27257832. | Tractography | 2017 | 20 | pOP, pTRI | STG, MTG | DTI |  |
| 63 | Shimada S, Kunii N, Kawai K, Matsuo T, Ishishita Y, Ibayashi K, Saito N. Impact of volume-conducted potential in interpretation of cortico-cortical evoked potential: Detailed analysis of high-resolution electrocorticography using two mathematical approaches. Clin Neurophysiol. 2017 Apr;128(4):549-557. doi: 10.1016/j.clinph.2017.01.012. Epub 2017 Jan 30. PMID: 28226289. | CCEPs | 2017 | 8 | vPM, pOP | MTG |  | Epilepsy |
| 64 | Piervincenzi C, Petrilli A, Marini A, Caulo M, Committeri G, Sestieri C. Multimodal assessment of hemispheric lateralization for language and its relevance for behavior. Neuroimage. 2016 Nov 15;142:351-370. doi: 10.1016/j.neuroimage.2016.08.018. Epub 2016 Aug 10. PMID: 27521745. | Tractography | 2016 | 20 | vPM, pOP | STG, MTG | DTI | Healthy |
| 65 | Vaquero L, Rodríguez-Fornells A, Reiterer SM. The Left, The Better: White- Matter Brain Integrity Predicts Foreign Language Imitation Ability. Cereb Cortex. 2017 Aug 1;27(8):3906-3917. doi: 10.1093/cercor/bhw199. PMID: 27461123. | Tractography | 2016 | 52 | vPM, pOP | STG, MTG | DTI | Healthy |
| 66 | Takaya S, Liu H, Greve DN, Tanaka N, Leveroni C, Cole AJ, Stufflebeam SM. Altered anterior-posterior connectivity through the arcuate fasciculus in temporal lobe epilepsy. Hum Brain Mapp. 2016 Dec;37(12):4425-4438. doi: 10.1002/hbm.23319. Epub 2016 Jul 25. PMID: 27452151; PMCID: PMC5319387. | Tractography | 2016 | 34 | pOP, pTRI | STG, MTG | DTI | Epilepsy |
| 67 | Vassal F, Schneider F, Boutet C, Jean B, Sontheimer A, Lemaire JJ. Combined DTI Tractography and Functional MRI Study of the Language Connectome in Healthy Volunteers: Extensive Mapping of White Matter Fascicles and Cortical Activations. PLoS One. 2016 Mar 30;11(3):e0152614. doi: 10.1371/journal.pone.0152614. PMID: 27029050; PMCID: PMC4814138. | Tractography | 2016 | 20 | vPM, pOP | STG, MTG | DTI | Healthy |
| 68 | Papinutto N, Galantucci S, Mandelli ML, Gesierich B, Jovicich J, Caverzasi E, Henry RG, Seeley WW, Miller BL, Shapiro KA, Gorno-Tempini ML. Structural connectivity of the human anterior temporal lobe: A diffusion magnetic resonance imaging study. Hum Brain Mapp. 2016 Jun;37(6):2210-22. doi: 10.1002/hbm.23167. Epub 2016 Mar 4. PMID: 26945805; PMCID: PMC4922800. | Tractography | 2016 | 21 | pOP | vATL | HARDI | Neurodegenerative |
| 69 | Zhao J, Thiebaut de Schotten M, Altarelli I, Dubois J, Ramus F. Altered hemispheric lateralization of white matter pathways in developmental dyslexia: Evidence from spherical deconvolution tractography. Cortex. 2016 Mar;76:51-62. doi: 10.1016/j.cortex.2015.12.004. Epub 2016 Jan 14. PMID: 26859852. | Tractography | 2016 | 64 | vPM, pOP | STG, MTG, pITG | HARDI | Neurodevelopmental |
| 70 | Caverzasi E, Hervey-Jumper SL, Jordan KM, Lobach IV, Li J, Panara V, Racine CA, Sankaranarayanan V, Amirbekian B, Papinutto N, Berger MS, Henry RG. Identifying preoperative language tracts and predicting postoperative functional recovery using HARDI q-ball fiber tractography in patients with gliomas. J Neurosurg. 2016 Jul;125(1):33-45. doi: 10.3171/2015.6.JNS142203. Epub 2015 Dec 11. PMID: 26654181. | Tractography | 2016 | 10 | pOP, pTRI, MFG | STG, MTG, pITG | HARDI | Oncological |
| 71 | Yagmurlu K, Middlebrooks EH, Tanriover N, Rhoton AL Jr. Fiber tracts of the dorsal language stream in the human brain. J Neurosurg. 2016 May;124(5):1396-405. doi: 10.3171/2015.5.JNS15455. Epub 2015 Nov 20. PMID: 26587654. | Dissection | 2016 | 28 | vPM, pOP, pTRI, MFG | STG, MTG, pITG, vATL |  |  |
| 72 | Yagmurlu K, Middlebrooks EH, Tanriover N, Rhoton AL Jr. Fiber tracts of the dorsal language stream in the human brain. J Neurosurg. 2016 May;124(5):1396-405. doi: 10.3171/2015.5.JNS15455. Epub 2015 Nov 20. PMID: 26587654. | Tractography | 2016 | 2 | vPM, pOP, pTRI, MFG | STG,MTG, pSTG | HARDI | Healthy |
| 73 | Burks JD, Boettcher LB, Conner AK, Glenn CA, Bonney PA, Baker CM, Briggs RG, Pittman NA, O'Donoghue DL, Wu DH, Sughrue ME. White matter connections of the inferior parietal lobule: A study of surgical anatomy. Brain Behav. 2017 Mar 8;7(4):e00640. doi: 10.1002/brb3.640. PMID: 28413699; PMCID: PMC5390831. | Dissection | 2016 | 10 | MFG | STG, MTG |  |  |
| 74 | Pescatori L, Tropeano MP, Manfreda A, Delfini R, Santoro A. Three- Dimensional Anatomy of the White Matter Fibers of the Temporal Lobe: Surgical Implications. World Neurosurg. 2017 Apr;100:144-158. doi: 10.1016/j.wneu.2016.12.120. Epub 2017 Jan 5. PMID: 28065876. | Dissection | 2016 | 8 | pOP, pTRI, MFG | STG, MTG, vATL |  |  |
| 75 | Wu Y, Sun D, Wang Y, Wang Y, Wang Y. Tracing short connections of the temporo-parieto-occipital region in the human brain using diffusion spectrum imaging and fiber dissection. Brain Res. 2016 Sep 1;1646:152-159. doi: 10.1016/j.brainres.2016.05.046. Epub 2016 May 25. PMID: 27235864. | Dissection | 2016 | 2 |  | MTG, pITG |  |  |
| 76 | Tamura Y, Ogawa H, Kapeller C, Prueckl R, Takeuchi F, Anei R, Ritaccio A, Guger C, Kamada K. Passive language mapping combining real-time oscillation analysis with cortico-cortical evoked potentials for awake craniotomy. J Neurosurg. 2016 Dec;125(6):1580-1588. doi: 10.3171/2015.4.JNS15193. Epub 2016 Mar 18. PMID: 26991386. | CCEPs | 2016 | 5 |  | STG |  | Oncological |
| 77 | Budisavljevic S, Dell'Acqua F, Rijsdijk FV, Kane F, Picchioni M, McGuire P, Toulopoulou T, Georgiades A, Kalidindi S, Kravariti E, Murray RM, Murphy DG, Craig MC, Catani M. Age-Related Differences and Heritability of the Perisylvian Language Networks. J Neurosci. 2015 Sep 16;35(37):12625-34. doi: 10.1523/JNEUROSCI.1255-14.2015. PMID: 26377454; PMCID: PMC4571601. | Tractography | 2015 | 101 | pOP | STG, MTG | DTI | Healthy |
| 78 | Gullick MM, Booth JR. The direct segment of the arcuate fasciculus is predictive of longitudinal reading change. Dev Cogn Neurosci. 2015 Jun;13:68-74. doi: 10.1016/j.dcn.2015.05.002. Epub 2015 May 13. PMID: 26011750; PMCID: PMC4480913. | Tractography | 2015 | 30 | pOP, pTRI, MFG | STG, MTG | DTI | Healthy |
| 79 | Dubois J, Poupon C, Thirion B, Simonnet H, Kulikova S, Leroy F, Hertz- Pannier L, Dehaene-Lambertz G. Exploring the Early Organization and Maturation of Linguistic Pathways in the Human Infant Brain. Cereb Cortex. 2016 May;26(5):2283-98. doi: 10.1093/cercor/bhv082. Epub 2015 Apr 29. PMID: 25924951. | Tractography | 2015 | 21 | vPM, pOP | STG, MTG, pITG, vATL | HARDI | Healthy |
| 80 | Kamali A, Sair HI, Radmanesh A, Hasan KM. Decoding the superior parietal lobule connections of the superior longitudinal fasciculus/arcuate fasciculus in the human brain. Neuroscience. 2014 Sep 26;277:577-83. doi: 10.1016/j.neuroscience.2014.07.035. Epub 2014 Jul 30. PMID: 25086308. | Tractography | 2015 | 5 | pOP, pTRI | STG, MTG | DTI | Healthy |
| 81 | Fernández-Miranda JC, Wang Y, Pathak S, Stefaneau L, Verstynen T, Yeh FC. Asymmetry, connectivity, and segmentation of the arcuate fascicle in the human brain. Brain Struct Funct. 2015;220(3):1665-80. doi: 10.1007/s00429-014-0751-7. Epub 2014 Mar 17. PMID: 24633827. | Tractography | 2015 | 10 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG; MTG; PITG, VATL | Generalised q-sampling imaging | Healthy |
| 82 | Fernández-Miranda JC, Wang Y, Pathak S, Stefaneau L, Verstynen T, Yeh FC. Asymmetry, connectivity, and segmentation of the arcuate fascicle in the human brain. Brain Struct Funct. 2015;220(3):1665-80. doi: 10.1007/s00429-014-0751-7. Epub 2014 Mar 17. PMID: 24633827. | Dissection | 2015 | 5 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG; MTG; PITG, VATL |  |  |
| 83 | Sarubbo S, De Benedictis A, Milani P, Paradiso B, Barbareschi M, Rozzanigo U, Colarusso E, Tugnoli V, Farneti M, Granieri E, Duffau H, Chioffi F. The course and the anatomo-functional relationships of the optic radiation: a combined study with 'post mortem' dissections and 'in vivo' direct electrical mapping. J Anat. 2015 Jan;226(1):47-59. doi: 10.1111/joa.12254. Epub 2014 Nov 17. PMID: 25402811; PMCID: PMC4313898. | Dissection | 2015 | 3 | vPM, pOP, pTRI | STG, MTG, pITG |  |  |
| 84 | Entz L, Tóth E, Keller CJ, Bickel S, Groppe DM, Fabó D, Kozák LR, Erőss L, Ulbert I, Mehta AD. Evoked effective connectivity of the human neocortex. Hum Brain Mapp. 2014 Dec;35(12):5736-53. doi: 10.1002/hbm.22581. Epub 2014 Jul 12. PMID: 25044884; PMCID: PMC4797947. | CCEPs | 2015 | 14 |  | STG, MTG, pITG, vATL |  | Epilepsy |
| 85 | Yamao Y, Matsumoto R, Kunieda T, Arakawa Y, Kobayashi K, Usami K, Shibata S, Kikuchi T, Sawamoto N, Mikuni N, Ikeda A, Fukuyama H, Miyamoto S. Intraoperative dorsal language network mapping by using single-pulse electrical stimulation. Hum Brain Mapp. 2014 Sep;35(9):4345-61. doi: 10.1002/hbm.22479. Epub 2014 Feb 24. PMID: 24615889; PMCID: PMC6869787. | Tractography | 2014 | 6 | vPM, pOP, pTRI | STG, MTG, pITG | DTI | Oncological |
| 86 | Yamao Y, Matsumoto R, Kunieda T, Arakawa Y, Kobayashi K, Usami K, Shibata S, Kikuchi T, Sawamoto N, Mikuni N, Ikeda A, Fukuyama H, Miyamoto S. Intraoperative dorsal language network mapping by using single-pulse electrical stimulation. Hum Brain Mapp. 2014 Sep;35(9):4345-61. doi: 10.1002/hbm.22479. Epub 2014 Feb 24. PMID: 24615889; PMCID: PMC6869787. | CCEPs | 2014 | 6 | pOP, pTRI, MFG | STG, MTG, pITG |  | Oncological |
| 87 | Leroux E, Delcroix N, Dollfus S. Left fronto-temporal dysconnectivity within the language network in schizophrenia: an fMRI and DTI study. Psychiatry Res. 2014 Sep 30;223(3):261-7. doi: 10.1016/j.pscychresns.2014.06.002. Epub 2014 Jul 1. PMID: 25028156. | Tractography | 2014 | 40 | pTRI | STG | DTI | Neurodevelopmental/Healthy |
| 88 | Forkel SJ, Thiebaut de Schotten M, Dell'Acqua F, Kalra L, Murphy DG, Williams SC, Catani M. Anatomical predictors of aphasia recovery: a tractography study of bilateral perisylvian language networks. Brain. 2014 Jul;137(Pt 7):2027-39. doi: 10.1093/brain/awu113. PMID: 24951631. | Tractography | 2014 | 16 | vPM, pOP | STG, MTG | DTI | Cerebrovascolar |
| 89 | Van Beek L, Ghesquière P, Lagae L, De Smedt B. Left fronto-parietal white matter correlates with individual differences in children's ability to solve additions and multiplications: a tractography study. Neuroimage. 2014 Apr 15;90:117-27. doi: 10.1016/j.neuroimage.2013.12.030. Epub 2013 Dec 22. PMID: 24368261. | Tractography | 2014 | 18 | vPM | STG, MTG | DTI | Neurodevelopmental/Paediatric |
| 90 | Yeh FC, Verstynen TD, Wang Y, Fernández-Miranda JC, Tseng WY. Deterministic diffusion fiber tracking improved by quantitative anisotropy. PLoS One. 2013 Nov 15;8(11):e80713. doi: 10.1371/journal.pone.0080713. PMID: 24348913; PMCID: PMC3858183. | Tractography | 2014 | 1 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG, MTG, pITG | DSI/HARDI | Healthy |
| 91 | Brown EC, Jeong JW, Muzik O, Rothermel R, Matsuzaki N, Juhász C, Sood S, Asano E. Evaluating the arcuate fasciculus with combined diffusion-weighted MRI tractography and electrocorticography. Hum Brain Mapp. 2014 May;35(5):2333-47. doi: 10.1002/hbm.22331. Epub 2013 Aug 24. PMID: 23982893; PMCID: PMC3933455. | Tractography | 2014 | 5 | vPM, dorsal laryngeal area | STG, MTG | DTI | Epilepsy |
| 92 | López-Barroso D, Catani M, Ripollés P, Dell'Acqua F, Rodríguez-Fornells A, de Diego-Balaguer R. Word learning is mediated by the left arcuate fasciculus. Proc Natl Acad Sci U S A. 2013 Aug 6;110(32):13168-73. doi: 10.1073/pnas.1301696110. Epub 2013 Jul 24. PMID: 23884655; PMCID: PMC3740909. | Tractography | 2014 | 21 | vPM, pOP | STG, MTG | DTI | Healthy |
| 93 | Zemmoura I, Serres B, Andersson F, Barantin L, Tauber C, Filipiak I, Cottier JP, Venturini G, Destrieux C. FIBRASCAN: a novel method for 3D white matter tract reconstruction in MR space from cadaveric dissection. Neuroimage. 2014 Dec;103:106-118. doi: 10.1016/j.neuroimage.2014.09.016. Epub 2014 Sep 16. PMID: 25234114. | Dissection | 2014 | 5 | vPM | MTG |  |  |
| 94 | De Benedictis A, Duffau H, Paradiso B, Grandi E, Balbi S, Granieri E, Colarusso E, Chioffi F, Marras CE, Sarubbo S. Anatomo-functional study of the temporo-parieto-occipital region: dissection, tractographic and brain mapping evidence from a neurosurgical perspective. J Anat. 2014 Aug;225(2):132-51. doi: 10.1111/joa.12204. Epub 2014 Jun 30. PMID: 24975421; PMCID: PMC4111924. | Dissection | 2014 | 4 | vPM, pOP, MFG | STG, MTG |  |  |
| 95 | Zhuang L, Sachdev PS, Trollor JN, Reppermund S, Kochan NA, Brodaty H, Wen W. Microstructural white matter changes, not hippocampal atrophy, detect early amnestic mild cognitive impairment. PLoS One. 2013;8(3):e58887. doi: 10.1371/journal.pone.0058887. Epub 2013 Mar 14. PMID: 23516569; PMCID: PMC3597581. | Tractography | 2013 | 221 | vPM | MTG | DTI | Neurodegenerative |
| 96 | Martino J, da Silva-Freitas R, Caballero H, Marco de Lucas E, García- Porrero JA, Vázquez-Barquero A. Fiber dissection and diffusion tensor imaging tractography study of the temporoparietal fiber intersection area. Neurosurgery. 2013 Mar;72(1 Suppl Operative):87-97; discussion 97-8. doi: 10.1227/NEU.0b013e318274294b. PMID: 23417154. | Tractography | 2013 | 2 | vPM | MTG, ITG | DTI | Healthy |
| 97 | Short SJ, Elison JT, Goldman BD, Styner M, Gu H, Connelly M, Maltbie E, Woolson S, Lin W, Gerig G, Reznick JS, Gilmore JH. Associations between white matter microstructure and infants' working memory. Neuroimage. 2013 Jan 1;64:156-66. doi: 10.1016/j.neuroimage.2012.09.021. Epub 2012 Sep 16. PMID: 22989623; PMCID: PMC3838303. | Tractography | 2013 | 73 | vPM | STG | DTI | Neurodevelopmental |
| 98 | Martino J, De Witt Hamer PC, Berger MS, Lawton MT, Arnold CM, de Lucas EM, Duffau H. Analysis of the subcomponents and cortical terminations of the perisylvian superior longitudinal fasciculus: a fiber dissection and DTI tractography study. Brain Struct Funct. 2013 Jan;218(1):105-21. doi: 10.1007/s00429-012-0386-5. Epub 2012 Mar 16. PMID: 22422148. | Dissection | 2013 | 6 | vPM, pOP, pTRI, MFG | MTG, pITG |  | Healthy |
| 99 | Martino J, De Witt Hamer PC, Berger MS, Lawton MT, Arnold CM, de Lucas EM, Duffau H. Analysis of the subcomponents and cortical terminations of the perisylvian superior longitudinal fasciculus: a fiber dissection and DTI tractography study. Brain Struct Funct. 2013 Jan;218(1):105-21. doi: 10.1007/s00429-012-0386-5. Epub 2012 Mar 16. PMID: 22422148. | Tractography | 2013 | 3 | vPM, pOP, pTRI, MFG | MTG, pITG | DTI | Healthy |
| 100 | Griffiths JD, Marslen-Wilson WD, Stamatakis EA, Tyler LK. Functional organization of the neural language system: dorsal and ventral pathways are critical for syntax. Cereb Cortex. 2013 Jan;23(1):139-47. doi: 10.1093/cercor/bhr386. Epub 2012 Jan 23. PMID: 22275482; PMCID: PMC3601415. | Tractography | 2013 | 30 | pOP | STG | DTI | Healthy |
| 101 | David O, Job AS, De Palma L, Hoffmann D, Minotti L, Kahane P. Probabilistic functional tractography of the human cortex. Neuroimage. 2013 Oct 15;80:307-17. doi: 10.1016/j.neuroimage.2013.05.075. Epub 2013 May 24. PMID: 23707583. | CCEPs | 2013 | 35 | pOP | STG, MTG |  |  |
| 102 | Enatsu R, Kubota Y, Kakisaka Y, Bulacio J, Piao Z, O'Connor T, Horning K, Mosher J, Burgess RC, Bingaman W, Nair DR. Reorganization of posterior language area in temporal lobe epilepsy: a cortico-cortical evoked potential study. Epilepsy Res. 2013 Jan;103(1):73-82. doi: 10.1016/j.eplepsyres.2012.07.008. Epub 2012 Jul 20. PMID: 22819071. | CCEPs | 2013 | 6 |  | STG, MTG |  | Epilepsy |
| 103 | Thiebaut de Schotten M, Dell'Acqua F, Valabregue R, Catani M. Monkey to human comparative anatomy of the frontal lobe association tracts. Cortex. 2012 Jan;48(1):82-96. doi: 10.1016/j.cortex.2011.10.001. Epub 2011 Oct 12. PMID: 22088488. | Tractography | 2012 | 1 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG, MTG, PITG | DTI | Healthy |
| 104 | De Benedictis A, Sarubbo S, Duffau H. Subcortical surgical anatomy of the lateral frontal region: human white matter dissection and correlations with functional insights provided by intraoperative direct brain stimulation: laboratory investigation. J Neurosurg. 2012 Dec;117(6):1053-69. doi: 10.3171/2012.7.JNS12628. Epub 2012 Sep 21. PMID: 22998058. | Dissection | 2012 | 5 | pOP, pTRI | STG, MTG |  |  |
| 105 | Martino J, De Witt Hamer PC, Vergani F, Brogna C, de Lucas EM, Vázquez- Barquero A, García-Porrero JA, Duffau H. Cortex-sparing fiber dissection: an improved method for the study of white matter anatomy in the human brain. J Anat. 2011 Oct;219(4):531-41. doi: 10.1111/j.1469-7580.2011.01414.x. Epub 2011 Jul 18. PMID: 21767263; PMCID: PMC3196758. | Tractography | 2011 | 1 | pOP, MFG | STG, mTG | DTI | Healthy |
| 106 | Martino J, De Witt Hamer PC, Vergani F, Brogna C, de Lucas EM, Vázquez- Barquero A, García-Porrero JA, Duffau H. Cortex-sparing fiber dissection: an improved method for the study of white matter anatomy in the human brain. J Anat. 2011 Oct;219(4):531-41. doi: 10.1111/j.1469-7580.2011.01414.x. Epub 2011 Jul 18. PMID: 21767263; PMCID: PMC3196758. | Dissection | 2011 | 15 | vPM | MTG, pITG |  | Healthy |
| 107 | Galantucci S, Tartaglia MC, Wilson SM, Henry ML, Filippi M, Agosta F, Dronkers NF, Henry RG, Ogar JM, Miller BL, Gorno-Tempini ML. White matter damage in primary progressive aphasias: a diffusion tensor tractography study. Brain. 2011 Oct;134(Pt 10):3011-29. doi: 10.1093/brain/awr099. Epub 2011 Jun 11. PMID: 21666264; PMCID: PMC3187537. | Tractography | 2011 | 48 | dorsal laryngeal motor area, pOP, pTRI | STG, MTG | DTI | Neurodegenerative |
| 108 | Phillips OR, Clark KA, Woods RP, Subotnik KL, Asarnow RF, Nuechterlein KH, Toga AW, Narr KL. Topographical relationships between arcuate fasciculus connectivity and cortical thickness. Hum Brain Mapp. 2011 Nov;32(11):1788-801. doi: 10.1002/hbm.21147. Epub 2010 Sep 30. PMID: 20886580; PMCID: PMC3071430. | Tractography | 2011 | 36 | vPM, dorsal laryngeal motor area, pOP, pTRI, MFG | STG, MTG | DTI | Healthy |
| 109 | Conner CR, Ellmore TM, DiSano MA, Pieters TA, Potter AW, Tandon N. Anatomic and electro-physiologic connectivity of the language system: a combined DTI-CCEP study. Comput Biol Med. 2011 Dec;41(12):1100-9. doi: 10.1016/j.compbiomed.2011.07.008. Epub 2011 Aug 17. PMID: 21851933; PMCID: PMC3223284. | CCEPs | 2011 | 7 | vPM, pOP, dorsal laryngeal motor area, pTRI | STG, MTG, vATL |  | Epilepsy |
| 110 | Thiebaut de Schotten M, Ffytche DH, Bizzi A, Dell'Acqua F, Allin M, Walshe M, Murray R, Williams SC, Murphy DG, Catani M. Atlasing location, asymmetry and inter-subject variability of white matter tracts in the human brain with MR diffusion tractography. Neuroimage. 2011 Jan 1;54(1):49-59. doi: 10.1016/j.neuroimage.2010.07.055. Epub 2010 Aug 2. PMID: 20682348. | Tractography | 2010 | 40 |  | STG, MTG | DTI | Healthy |
| 111 | Saur D, Schelter B, Schnell S, Kratochvil D, Küpper H, Kellmeyer P, Kümmerer D, Klöppel S, Glauche V, Lange R, Mader W, Feess D, Timmer J, Weiller C. Combining functional and anatomical connectivity reveals brain networks for auditory language comprehension. Neuroimage. 2010 Feb 15;49(4):3187-97. doi: 10.1016/j.neuroimage.2009.11.009. Epub 2009 Nov 12. PMID: 19913624. | Tractography | 2010 | 33 | pOP, MFG, frontal operculum | STG | DTI | Healthy |
| 112 | Agosta F, Henry RG, Migliaccio R, Neuhaus J, Miller BL, Dronkers NF, Brambati SM, Filippi M, Ogar JM, Wilson SM, Gorno-Tempini ML. Language networks in semantic dementia. Brain. 2010 Jan;133(Pt 1):286-99. doi: 10.1093/brain/awp233. Epub 2009 Sep 16. PMID: 19759202; PMCID: PMC2801321. | Tractography | 2010 | 5 | vPM,pOP, dorsal laryngeal motor area | STG, MTG, vATL | DTI | Neurodegenerative |
| 113 | Diehl B, Piao Z, Tkach J, Busch RM, LaPresto E, Najm I, Bingaman B, Duncan J, Lüders H. Cortical stimulation for language mapping in focal epilepsy: correlations with tractography of the arcuate fasciculus. Epilepsia. 2010 Apr;51(4):639-46. doi: 10.1111/j.1528-1167.2009.02421.x. Epub 2009 Dec 7. PMID: 20002151. | Tractography | 2009 | 19 | vPM, pOP | STG, MTG | DTI | Epilepsy |
| 114 | Bernal B, Altman N. The connectivity of the superior longitudinal fasciculus: a tractography DTI study. Magn Reson Imaging. 2010 Feb;28(2):217-25. doi: 10.1016/j.mri.2009.07.008. Epub 2009 Aug 19. PMID: 19695825. | Tractography | 2009 | 12 | vPM, dorsal laryngeal area | STG,MTG, PITG | DTI | Healthy |
| 115 | Makris N, Papadimitriou GM, Kaiser JR, Sorg S, Kennedy DN, Pandya DN. Delineation of the middle longitudinal fascicle in humans: a quantitative, in vivo, DT-MRI study. Cereb Cortex. 2009 Apr;19(4):777-85. doi: 10.1093/cercor/bhn124. Epub 2008 Jul 31. PMID: 18669591; PMCID: PMC2651473. | Tractography | 2009 | 4 | vPM, MFG | MTG | DTI | Healthy |
| 116 | Saur D, Kreher BW, Schnell S, Kümmerer D, Kellmeyer P, Vry MS, Umarova R, Musso M, Glauche V, Abel S, Huber W, Rijntjes M, Hennig J, Weiller C. Ventral and dorsal pathways for language. Proc Natl Acad Sci U S A. 2008 Nov 18;105(46):18035-40. doi: 10.1073/pnas.0805234105. Epub 2008 Nov 12. PMID: 19004769; PMCID: PMC2584675. | Tractography | 2008 | 33 | pOP, MFG, frontal operculum | STG | DTI | Healthy |
| 117 | Glasser MF, Rilling JK. DTI tractography of the human brain's language pathways. Cereb Cortex. 2008 Nov;18(11):2471-82. doi: 10.1093/cercor/bhn011. Epub 2008 Feb 14. PMID: 18281301. | Tractography | 2008 | 20 | vPM, pOP, pTRI, MFG | STG, MTG | DTI | Healthy |
| 118 | Parker GJ, Luzzi S, Alexander DC, Wheeler-Kingshott CA, Ciccarelli O, Lambon Ralph MA. Lateralization of ventral and dorsal auditory-language pathways in the human brain. Neuroimage. 2005 Feb 1;24(3):656-66. doi: 10.1016/j.neuroimage.2004.08.047. Epub 2004 Dec 8. PMID: 15652301. | Tractography | 2005 | 11 | vPM, pOP | STG, MTG | DTI | Healthy |
| 119 | Catani M, Jones DK, ffytche DH. Perisylvian language networks of the human brain. Ann Neurol. 2005 Jan;57(1):8-16. doi: 10.1002/ana.20319. PMID: 15597383. | Tractography | 2005 | 11 | pOP, vPM | STG, MTG | DTI | Healthy |
| 120 | Matsumoto R, Nair DR, LaPresto E, Najm I, Bingaman W, Shibasaki H, Lüders HO. Functional connectivity in the human language system: a cortico-cortical evoked potential study. Brain. 2004 Oct;127(Pt 10):2316-30. doi: 10.1093/brain/awh246. Epub 2004 Jul 21. PMID: 15269116. | CCEPs | 2004 | 7 | vPM, pOP, pTRI | STG, MTG, pITG, vATL |  | Epilepsy |
| 121 | Catani M, Howard RJ, Pajevic S, Jones DK. Virtual in vivo interactive dissection of white matter fasciculi in the human brain. Neuroimage. 2002 Sep;17(1):77-94. doi: 10.1006/nimg.2002.1136. PMID: 12482069. | Tractography | 2002 | 1 | pOP, insula | STG, MTG, pITG, vATL | DTI | Healthy |
| 122 | Türe U, Yaşargil MG, Friedman AH, Al-Mefty O (2000) Fiber dissec- tion technique: lateral aspect of the brain. Neurosurgery 47:417– 427. https://doi.org/10.1097/00006123-200008000-00028 | Dissection | 2000 | 10 | pTRI, pORB | MTG |  |  |
| 123 | Ludwig E, Klingler J (1956) Atlas cerebri humani: Der innere Bau des Gehirns dargestellt auf Grund makroskopischer Präparate. The inner structure of the brain demonstrated on the basis of macroscopical preparations. Little, Brown | Dissection | 1956 | 1 | pOP, pTRI, MFG | STG, MTG, pITG, vATL |  |  |
| 124 | Dejerine J, Dejerine-Klumpke A (1895) Anatomie des centres nerveux. Tome 1. Paris: Rue et Cie | Dissection | 1895 | 1 |  | STG, MTG, vATL |  |  |
| 125 | Meynert T (1884) Klinik der erkrankungen des vorderhirns begründet auf dessen bau, leistungen und ernährung. Wilhelm Braumüller, Wien | Dissection | 1884 | 1 |  | STG, MTG, pITG, vATL |  |  |