

Education

Washington University in St. Louis

2018-2023

Ph.D. in Imaging Science
M.S. in Electrical Engineering

Washington University in St. Louis

2011-2015

B.A. in Biochemistry

Experience

Harvard University · MGH

2023-

Research fellow (PI: Julie C. Price)

Washington University in St. Louis

2017-2023

Research assistant (PI: Tammie L.S. Benzinger)

- Wrote a PET-to-pathology pipeline to evaluate treatment effects in the first Dominantly Inherited Alzheimer Network clinical trial

Washington University in St. Louis/University of Oxford · FMRIB

2012-2015

Research assistant (PI: David C. Van Essen)

- Wrote an MRI-to-pathology pipeline to evaluate biases in brain connectivity maps developed by the Human Connectome Project

Skills

Programming languages

- Bash, MATLAB, Python, R

Team management

- Led a team to establish a imaging-to-pathology pipeline for the first Dominantly Inherited Alzheimer Network clinical trial, resulting in one abstract
- Led a team to implement and evaluate the visual read procedure for the first FDA-approved tau PET radioligand, resulting in one paper and one abstract
- Led a team to establish a imaging-to-pathology pipeline for the Knight Alzheimer Disease Research Center, resulting in two papers and three abstracts
- Mentored trainees in data acquisition, image analysis, computer programming, statistical modeling, and manuscript writing, resulting in four papers and three abstracts

Honors and awards

2024	American Association of Neuropathologists Travel Award	\$1,000
2023	PET/MR in Alzheimer's Disease and Related Dementias T32 Fellowship	\$75,184
2023	Poletsky Award	\$2,000
2021	McKelvey School of Engineering Dean's Scholarly Award	\$5,000
2020	Knight Alzheimer Disease Research Center T32 Fellowship	\$25,836
2020	Human Amyloid Imaging Travel Scholarship	\$1,000
2018	NSF Graduate Research Fellowship Program (GRFP)	\$138,000
2013	HHMI Summer Undergraduate Research Fellowship (SURF)	\$4,000
2011	National Merit Scholarship	\$2,500

Service

2024-2025	<i>Brain</i>	<i>Ad hoc reviewer</i>
2022-2023	Quantitative Imaging Biomarkers Alliance (QIBA) Tau Profile Committee	Assistant to the co-chairs
2022-2023	Imaging Science Student Council Executive Board	Co-founder
2020-2021	<i>Nature Reviews Neurology</i>	<i>Ad hoc reviewer</i>
2017-2023	Pathology And Imaging Neurodegeneration and Tau (PAINT) Committee	Co-founder

Publications

- 2024 Michelle E Farrell, Emma G Thibault, J Alex Becker, Julie C Price, Brian C Healy, Bernard J Hanseeuw, Rachel F Buckley, Heidi IL Jacobs, Aaron P Schultz, **Charles D Chen**, Reisa A Sperling, and Keith A Johnson. Spatial extent as a sensitive amyloid-PET metric in preclinical Alzheimer's disease. *Alzheimer's and Dementia*
- 2024 Stephanie A Schultz, Lei Liu, Aaron P Schultz, Colleen D Fitzpatrick, Raina Levin, Jean-Pierre Bellier, Zahra Shirzadi, Nelly Joseph-Mathurin, **Charles Chen**, Tammie LS Benzinger, Gregory S Day, Martin R Farlow, Brian A Gordon, Jason J Hassenstab, Clifford R Jack Jr, Mathias Jucker, Celeste M Karch, Jae-Hong Lee, Johannes Levin, Richard J Perrin, Peter R Schofield, Chengjie Xiong, Keith A Johnson, Eric McDade, Randall J Bateman, Reisa A Sperling, Dennis J Selkoe, Jasmeer P Chhatwal, and the Dominantly Inherited Alzheimer Network Investigators. Functional variations in gamma-secretase activity are critical determinants of the clinical, biomarker, and cognitive progression of autosomal dominant Alzheimer's disease. *Lancet Neurology*
- 2024 Stephanie Doering, Austin McCullough, Brian A Gordon, **Charles Chen**, Nicole McKay, Diana Hobbs, Sarah Keefe, Shaney Flores, Jalen Scott, Hunter Smith, Stephen Jarman, Kelley Jackson, Russ Hornbeck, Beau M Ances, Chengjie Xiong, Andrew J Aschenbrenner, Jason Hassenstab, Carlos Cruchaga, Alisha Daniels, Randall J Bateman, the Dominantly Inherited Alzheimer Network (DIAN) Investigators, John C Morris, and Tammie LS Benzinger. Deconstructing pathological tau by biological process in early stages of Alzheimer disease: a method for quantifying tau spatial spread in neuroimaging. *eBioMedicine*. <https://doi.org/10.1016/j.ebiom.2024.105080>
- 2024 Karin L Meeker, Patrick H Lockett, Nicolas R Barthélemy, Diana A Hobbs, **Charles Chen**, James Bollinger, Vitaliy Ovod, Shaney Flores, Sarah Keefe, Rachel L Henson, Elizabeth M Herries, Eric McDade, Jason J Hassenstab, Chengjie Xiong, Carlos Cruchaga, Tammie LS Benzinger, David M Holtzman, Suzanne E Schindler, Randall J Bateman, John C Morris, Brian A Gordon, and Beau M Ances. Comparison of cerebrospinal fluid, plasma, and neuroimaging biomarker utility in Alzheimer disease. *Brain Communications*. <https://doi.org/10.1093/braincomms/fcae081>
- 2024 Gemma Salvadó, Kanta Horie, Nicolas R Barthélemy, Jacob W Vogel, Alexa Pichet Binette, **Charles D Chen**, Andrew J Aschenbrenner, Brian A Gordon, Tammie LS Benzinger, David M Holtzman, John C Morris, Sebastian Palmqvist, Erik Stomrud, Shorena Janelidze, Rik Ossenkoppele, Suzanne E Schindler, Randall J Bateman, and Oskar Hansson. Disease staging of Alzheimer's disease using a CSF-based biomarker model. *Nature Aging*. <https://doi.org/10.1038/s43587-024-00599-y>
- 2024 Nicolas R Barthélemy, Gemma Salvadó, Suzanne Schindler, Yingxin He, Shorena Janelidze, Lyduine Collij, Benjamin Saef, Rachel L Henson, **Charles D Chen**, Brian A Gordon, Tammie LS Benzinger, John C Morris, Niklas Mattsson-Carlsson, Sebastian Palmqvist, Rik Ossenkoppele, Erik Stomrud, Randall J Bateman, and Oskar Hansson. Highly accurate blood test for Alzheimer's disease comparable or superior to clinical CSF tests. *Nature Medicine*. <https://doi.org/10.1038/s41591-024-02869-z>
- 2024 Nelly Joseph-Mathurin, Rebecca L Feldman, Zahra Shirzadi, Carmen Toomer, Junie R Saint Clair, Yinjiao Ma, Nicole S McKay, Jeremy F Strain, Collin Kilgore, Karl A Friedrichsen, **Charles D Chen**, Brian A Gordon, Gengsheng Chen, Russ C Hornbeck, Parinaz Massoumzadeh, Austin A McCullough, Qing Wang, Yan Li, Guoqiao Wang, Sarah J Keefe, Stephanie A Schultz, Carlos Cruchaga, Gregory M Preboske, Clifford R Jack Jr, Jorge J Llibre-Guerra, Ricardo F Allegri, Beau M Ances, Sarah B Berman, William S Brooks, David M Cash, Gregory S Day, Nick C Fox, Michael Fulham, Bernardino Ghetti, Keith A Johnson, Mathias Jucker, William E Klunk, Christian la Fougère, Johannes Levin, Yoshiki Niimi, Hwamee Oh, Richard J Perrin, Gerald Reischl, John M Ringman, Andrew J Saykin, Peter R Schofield, Yi Su, Charlene Supnet-Bell, Jonathan Vöglein, Igor Yakushev, Adam M Brickman, John C Morris, Eric McDade, Chengjie Xiong, Randall J Bateman, Jasmeer P Chhatwal, and Tammie LS Benzinger. Presenilin-1 mutation position influences amyloidosis, small vessel disease, and dementia with disease stage. *Alzheimer's and Dementia*. <https://doi.org/10.1002/alz.13729>

- 2023 Kanta Horie, Gemma Salvadó, Nico Barthélemy, Shorena Janelidze, Yan Li, Yingxin He, Benjamin Saef, **Charles D Chen**, Hong Jiang, Olof Standberg, Alexa Pichet Binette, Sebastian Palmqvist, Chihiro Sato, Brian A Gordon, Tammie LS Benzinger, David M Holtzman, John C Morris, Niklas Mattsson-Carlgrén, Erik Stomrud, Rik Ossenkoppele, Suzanne E Schindler, Oskar Hansson, and Randall J Bateman. CSF MTBR-tau243 is a specific biomarker of tau tangle pathology in Alzheimer's disease. *Nature Medicine*. <https://doi.org/10.1038/s41591-023-02443-z>
- 2023 Stephanie A Schultz, Zahra Shirzadi, Aaron P Schultz, Lei Liu, Colleen D Fitzpatrick, Eric McDade, Alan Renton, Bianca Esposito, Nelly Joseph-Mathurin, Carlos Cruchaga, **Charles D Chen**, Alison Goate, Ricardo Francisco Allegri, Tammie LS Benzinger, Sarah Berman, Helena C Chui, Anne M Fagan, Martin R Farlow, Nick C Fox, Brian A Gordon, Neill R Graff-Radford, Jason J Hassenstab, Bernard J Hanseeuw, Anna Hofmann, Clifford R Jack Jr, Mathias Jucker, Celeste M Karch, Robert A Koeppe, Jae-Hong Lee, Allan I Levey, Johannes Levin, Ralph N Martins, Hiroshi Mori, John C Morris, James Noble, Richard J Perrin, Pedro Rosa-Neto, Stephen P Salloway, Raquel Sanchez-Valle, Peter R Schofield, Chengjie Xiong, Keith A Johnson, Randall J Bateman, Reisa A Sperling, Jasmeer P Chhatwal, and the Dominantly Inherited Alzheimer Network Investigators. Location of pathogenic variants in PSEN1 impacts progression of cognitive, clinical, and neurodegenerative measures in autosomal-dominant AD. *Aging Cell*. <http://doi.org/10.1111/acer.13871>
- 2023 **Charles Chen***, Maria Rosana Ponisio*, Jordan Lang, Shaney Flores, Suzanne Schindler, Anne Fagan, John Morris, and Tammie Benzinger. Comparing tau PET visual interpretation with tau PET quantification, CSF biomarkers, and longitudinal clinical assessment. *Journal of Alzheimer's Disease*. <https://doi.org/10.3233/JAD-230032>
- 2023 **Charles D Chen***, Austin McCullough*, Brian A Gordon*, Nelly Joseph-Mathurin, Shaney Flores, Nicole S McKay, Diana Hobbs, Russ Hornbeck, Anne M Fagan, Carlos Cruchaga, Alison M Goate, Richard J Perrin, Guoqiao Wang, Yan Li, Xinyu Shi, Chengjie Xiong, Michael J Pontecorvo, Gregory Klein, Yi Su, William E Klunk, Clifford Jack, Robert Koeppe, B Joy Snider, Sarah B Berman, Erik D Roberson, Jared Brosch, Ghulam Surti, Ivonne Z Jiménez-Velázquez, Douglas Galasko, Lawrence S Honig, William S Brooks, Roger Clarnette, David Wallon, Bruno Dubois, Jérémie Pariente, Florence Pasquier, Raquel Sanchez-Valle, Sergey Shcherbinin, Ixavier Higgins, Ilke Tunali, Colin L Masters, Christopher H van Dyck, Mario Masellis, Robin Hsiung, Serge Gauthier, Steve Salloway, David B Clifford, Susan Mills, Charlene Supnet-Bell, Eric McDade, Randall J Bateman, Tammie LS Benzinger, and for the DIAN-TU Study Team. Longitudinal head-to-head comparison of ¹¹C-PiB and ¹⁸F-florbetapir PET in a Phase 2/3 clinical trial of anti-amyloid- β monoclonal antibodies in dominantly inherited Alzheimer disease. *European Journal of Nuclear Medicine and Molecular Imaging*. <https://doi.org/10.1007/s00259-023-06209-0>
- 2023 Nicole S McKay, Brian A Gordon, Russ C Hornbeck, Aylin Dincer, Shaney Flores, Sarah Keefe, Nelly Joseph-Mathurin, Clifford R Jack, Robert Koeppe, Peter R Millar, Beau M Ances, **Charles D Chen**, Alisha Daniels, Diana A Hobbs, Kelley Jackson, Deborah Koudelis, Parinaz Massoumzadeh, Austin McCullough, Michael L Nickels, Farzaneh Rahmani, Laura Swisher, Qing Wang, Ricardo F Allegri, Sarah B Berman, Adam M Brickman, William S Brooks, David M Cash, Jasmeer P Chhatwal, Gregg Day, Martin R Farlow, Christian laFougère, Nick C Fox, Michael Fulham, Bernardino Ghetti, Neill Graff-Radford, Takeshi Ikeuchi, William Klunk, Jae-Hong Lee, Ralph Martins, Colin L Masters, Jonathan McConathy, Hiroshi Mori, James M Noble, Gerald Reischl, Christopher Rowe, Stephen Salloway, Raquel Sanchez-Valle, Peter R Schofield, Hiroyuki Shimada, Mikio Shoji, Yi Su, Kazushi Suzuki, Jonathan Vöglein, Igor Yakushev, Carlos Cruchaga, Jason Hassenstab, Celeste Karch, Eric McDade, Richard J Perrin, Chengjie Xiong, John C Morris, Randall J Bateman, Tammie LS Benzinger, and for the Dominantly Inherited Alzheimer Network. Positron emission tomography and magnetic resonance imaging methods and datasets within the Dominantly Inherited Alzheimer Network (DIAN). *Nature Neuroscience*. <https://doi.org/10.1038/s41593-023-01359-8>
- 2023 Farzaneh Rahmani, Saurabh Jindal, Cyrus A Raji, Wei Wang, Arash Nazeri, Gloria Guzman Perez-Carillo, Michelle M Miller-Thomas, Philipp Garner, Benedicte Marechal, Amit Shah, Mathis Zimmermann, **Charles D Chen**, Sarah Keefe, Pamela LaMontagne, and Tammie LS Benzinger. Validity assessment of an automated brain morphometry tool using patients with a de novo memory complaint. *American Journal of Neuroradiology*. <https://doi.org/10.3174/ajnr.A7790>
- 2023 Anna H Boerwinkle, Brian A Gordon, Julie Wisch, Shaney Flores, Rachel L Henson, Omar H Butt, Nicole McKay, **Charles D Chen**, Tammie LS Benzinger, Anne M Fagan, Benjamin L Handen, Bradley T Christian, Elizabeth Head, Mark Mapstone, Michael S Rafii, Sid O'Bryant, Florence Lai, H Diana Rosas, Joseph H Lee, Wayne Silverman, Adam M Brickman, Jasmeer P Chhatwal, Carlos Cruchaga, Richard J Perrin, Chengjie Xiong, Jason Hassenstab, Eric McDade, Randall J Bateman, Beau M Ances, on behalf of the Alzheimer's Biomarker Consortium-Down Syndrome, and the Dominantly Inherited Alzheimer Network. Amyloid PET in genetic causes of Alzheimer disease: Down syndrome versus autosomal dominant. *The Lancet Neurology*. [https://doi.org/10.1016/S1474-4422\(22\)00408-2](https://doi.org/10.1016/S1474-4422(22)00408-2)

- 2022 Aylin Dincer, **Charles D Chen**, Nicole S McKay, Lauren N Koenig, Austin McCullough, Shaney Flores, Sarah J Keefe, Stephanie A Schultz, Rebecca L Feldman, Nelly Joseph-Mathurin, Russ C Hornbeck, Carlos Cruchaga, Suzanne E Schindler, David M Holtzman, John C Morris, Anne M Fagan, Tammie LS Benzinger, and Brian A Gordon. APOE ϵ 4 genotype, amyloid- β , and sex interact to predict tau in regions of high APOE mRNA expression. *Science Translational Medicine*. <http://doi.org/10.1126/scitranslmed.abl7646>
- 2022 Guoqiao Wang*, Yan Li*, Chengjie Xiong, Eric McDade, David B Clifford, Susan L Mills, Anna M Santacruz, Andrew J Aschenbrenner, Jason Hassenstab, Tammie LS Benzinger, Brian A Gordon, Anne M Fagan, Kelley A Coalier, Jorge J Libre-Guerra, Austin McCullough, Nelly Joseph-Mathurin, **Charles Chen**, Catherine Mummery, Barbara A Wendelberger, Serge Gauthier, Mario Masellis, Karen C Holdridge, Roy Yaari, Saptarshi Chatterjee, John Sims, Paul Delmar, Geoffrey A Kerchner, Tobias Bittner, Carsten Hofmann, Randall J Bateman, and for the DIAN-TU Study Team. Evaluation of dose-dependent treatment effects after mid-trial dose escalation in biomarker, clinical, and cognitive outcomes for gantenerumab or solanezumab in dominantly inherited Alzheimer's disease. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*. <http://doi.org/10.1002/dad2.12367>
- 2022 Nelly Joseph-Mathurin*, Jorge J Libre-Guerra*, Yan Li, Austin A McCullough, Carsten Hofmann, Jakub Wojtowicz, Ethan Park, Guoqiao Wang, Gregory M Preboske, Qing Wang, Brian A Gordon, **Charles D Chen**, Shaney Flores, Neelum Aggarwal, Sarah B Berman, Thomas D Bird, Sandra E Black, Bret Borowski, William S Brooks, Jasmeer P Chhatwal, Roger Clarnette, Carlos Cruchaga, Anne M Fagan, Martin Farlow, Nick C Fox, Serge Gauthier, Jason Hassenstab, Diana A Hobbs, Karen C Holdridge, Lawrence S Honig, Russ C Hornbeck, Ging-Yuek R Hsiung, Clifford R Jack Jr, Ivonne Z Jimenez-Velazquez, Mathias Jucker, Gregory Klein, Johannes Levin, Michele Mancini, Mario Masellis, Nicole S McKay, Catherine J Mummery, John M Ringman, Hiroyuki Shimada, Joy Snider, Kazushi Suzuki, David Wallon, Chengjie Xiong, Roy Yaari, Eric McDade, Richard J Perrin, Randall J Bateman, Stephen P Salloway, Tammie LS Benzinger, David B Clifford, and for the Dominantly Inherited Alzheimer Network Trials Unit. Amyloid-related imaging abnormalities in the DIAN-TU-001 trial of gantenerumab and solanezumab: lessons from a trial in dominantly inherited Alzheimer disease. *Annals of Neurology*. <https://doi.org/10.1002/ana.26511>
- 2022 Shaney Flores, **Charles D Chen**, Yi Su, Aylin Dincer, Sarah J Keefe, Nicole S McKay, Angela M Paulick, Gloria Guzman Perez-Carillo, Russ C Hornbeck, Manu S Goyal, Andrei G Vlassenko, Sally W Schwarz, Michael L Nickels, Dean F Wong, Zhude Tu, Jonathan McConathy, John C Morris, Tammie Benzinger, and Brian A Gordon. Investigating tau and amyloid tracer skull binding in studies of Alzheimer disease. *Journal of Nuclear Medicine*. <https://doi.org/10.2967/jnumed.122.263948>
- 2022 Patrick H Luckett, **Charlie Chen**, Brian A Gordon, Julie Wisch, Sarah B Berman, Jasmeer P Chhatwal, Carlos Cruchaga, Anne M Fagan, Martin R Farlow, Nick C Fox, Mathias Jucker, Johannes Levin, Colin L Masters, Hiroshi Mori, James M Noble, Stephen Salloway, Peter R Schofield, Adam M Brickman, William S Brooks, David M Cash, Michael J Fulham, Bernardino Ghetti, Clifford R Jack, Jonathan Vöglein, William Klunk, Robert Koeppe, Yi Su, Michael Weiner, Qing Wang, Dan Marcus, Deborah Koudelis, Nelly Joseph-Mathurin, Lisa Cash, Russ Hornbeck, Chengjie Xiong, Richard J Perrin, Celeste M Karch, Jason Hassenstab, Eric McDade, John C Morris, Tammie LS Benzinger, Randall J Bateman, Beau M Ances, and for the Dominantly Inherited Alzheimer Network (DIAN). Biomarker clustering in autosomal dominant Alzheimer disease. *Alzheimer's & Dementia*. <https://doi.org/10.1002/alz.052149>
- 2022 Farzaneh Rahmani, Marina Nguyen, **Charles D Chen**, Nicole McKay, Aylin Dincer, Nelly Joseph-Mathurin, Gengsheng Chen, Jingxia Liu, Hilary LP Orlowski, John C Morris, and Tammie Benzinger. Intracranial internal carotid artery calcification is not predictive of future cognitive decline. *Alzheimer's Research & Therapy*. <https://doi.org/10.1186/s13195-022-00972-2>
- 2021 **Charles D Chen**, Nelly Joseph-Mathurin*, Namita Sinha*, Aihong Zhou*, Yan Li, Karl Friedrichsen, Austin McCullough, Erin E Franklin, Russ Hornbeck, Brian Gordon, Vijay Sharma, Carlos Cruchaga, Alison Goate, Celeste Karch, Eric McDade, Chengjie Xiong, Randall J Bateman, Bernardino Ghetti, John M Ringman, Jasmeer Chhatwal, Colin L Masters, Catriona McLean, Tammie Lashley, Yi Su, Robert Koeppe, Clifford Jack, William Klunk, John C Morris, Richard J Perrin, Nigel J Cairns**, and Tammie LS Benzinger**. Comparing amyloid- β plaque burden with antemortem PiB PET in autosomal dominant and late-onset Alzheimer disease. *Acta Neuropathologica*. <https://doi.org/10.1007/s00401-021-02342-y>
- 2021 Anna H Boerwinkle*, Julie K Wisch*, **Charles D Chen**, Brian A Gordon, Omar H Butt, Suzanne E Schindler, Courtney Sutphen, Shaney Flores, Aylin Dincer, Tammie LS Benzinger, Anne M Fagan, John C Morris, and Beau M Ances. Temporal correlation of CSF and neuroimaging in the Amyloid-Tau-Neurodegeneration model of Alzheimer disease. *Neurology*. <https://doi.org/10.1212/WNL.00000000000012123>

- 2020 **Charles D Chen**, Timothy R Holden, Brian A Gordon, Erin E Franklin, Yan Li, Dean W Coble, Hongbo Luo, Randall J Bateman, for the Dominantly Inherited Alzheimer Network (DIAN), for the Dominantly Inherited Alzheimer Network Trials Unit (DIAN-TU), Beau M Ances, Richard J Perrin, Tammie LS Benzinger, Nigel J Cairns, and John C Morris. Ante- and postmortem tau in autosomal dominant and late-onset Alzheimer disease. *Annals of Clinical and Translational Neurology*. <https://doi.org/10.1002/acn3.51237>
- 2019 Brian A Gordon, Tyler M Blazey, Jon Christensen, Aylin Dincer, Shaney Flores, Sarah Keefe, **Charles Chen**, Yi Su, Eric M McDade, Guoqiao Wang, Yan Li, Jason Hassenstab, Andrew Aschenbrenner, Russ Hornbeck, Clifford R Jack, Jr, Beau M Ances, Sarah B Berman, Jared R Brosch, Douglas Galasko, Serge Gauthier, James J Lah, Mario Masellis, Christopher H van Dyck, Mark Mintun, Gregory Klein, Smiljana Ristic, Nigel J Cairns, Daniel S Marcus, Chengjie Xiong, David M Holtzman, Marcus E Raichle, John C Morris, Randall J Bateman, and Tammie LS Benzinger. Tau PET in autosomal dominant Alzheimer's disease: relationship with cognition, dementia and other biomarkers. *Brain*. <https://doi.org/10.1093/brain/awz019>
- 2019 Qing Wang, Yong Wang, Jingxia Liu, Courtney L Sutphen, Carlos Cruchaga, Tyler Blazey, Brian A Gordon, Yi Su, **Charlie Chen**, Joshua S Shimony, Beau M Ances, Nigel J Cairns, Anne M Fagan, John C Morris, and Tammie LS Benzinger. Quantification of white matter cellularity and damage in preclinical and early symptomatic Alzheimer's disease. *NeuroImage: Clinical*. <https://doi.org/10.1016/j.nicl.2019.101767>
- 2019 Kaining Zhang, **Charles D Chen**, and Ilya E Monosov. Novelty, salience, and surprise timing are signaled by neurons in the basal forebrain. *Current Biology*. <https://doi.org/10.1016/j.cub.2018.11.012>
- 2018 Michiel Cottaar, Matteo Bastiani, **Charles Chen**, Krikor Dikranian, David Van Essen, Timothy E Behrens, Stamatios N Sotiropoulos, and Saad Jbabdi. A gyral coordinate system predictive of fibre orientations. *NeuroImage*. <https://doi.org/10.1016/j.neuroimage.2018.04.040>
- 2016 Noah M Ledbetter, **Charles D Chen**, and Ilya E Monosov. Multiple mechanisms for processing reward uncertainty in the primate basal forebrain. *Journal of Neuroscience*. <https://doi.org/10.1523/jneurosci.1123-16.2016>

Book chapters

- 2014 David C Van Essen, Saad Jbabdi, Stamatios N Sotiropoulos, **Charles Chen**, Krikor Dikranian, Tim Coalson, John Harwell, Timothy EJ Behrens, and Matthew F Glasser. Mapping connections in humans and non-human primates: aspirations and challenges for diffusion imaging. *Diffusion MRI: From Quantitative Measurement to In vivo Neuroanatomy*. <https://doi.org/10.1016/B978-0-12-396460-1.00016-0>

Conference talks

- 2024 **Charles D Chen**, Erin E Franklin, Yan Li, Nelly Joseph-Mathurin, Aime L Burns, Guoqiao Wang, Tammie LS Benzinger, Randall Bateman, and Richard J Perrin. Autopsy findings versus biomarker outcomes in a clinical trial of anti-A β therapies in dominantly inherited Alzheimer disease. *American Association of Neuropathologists (AANP)*
- 2024 **Charles D Chen**, Erin E Franklin, Yan Li, Nelly Joseph-Mathurin, Aime L Burns, Diana A Hobbs, Austin A McCullough, Stephanie A Schultz, Chengjie Xiong, Guoqiao Wang, Tammie LS Benzinger, Randall Bateman, and Richard J Perrin. Anti-amyloid-beta treatment effects on dominantly inherited Alzheimer disease neuropathology: Preliminary autopsy findings from the DIAN-TU-001 trial of gantenerumab or solanezumab. *Alzheimer's and Parkinson's Diseases Conference (AD/PD)*
- 2021 **Charles D Chen**, Jordan A Lang, Shaney Flores, Suzanne E Schindler, Anne M Fagan, John C Morris, Tammie LS Benzinger, and Maria Rosana Ponisio. Concordance of PET tau visual reads with PET tau quantification and CSF pTau. *Radiological Society of North America (RSNA)*
- 2020 **Charles D Chen**, Timothy R Holden, Brian A Gordon, Erin E Franklin, Richard J Perrin, John C Morris, Randall Bateman, Tammie LS Benzinger, Nigel J Cairns, and for the Dominantly Inherited Alzheimer Network (DIAN). Tauopathy in autosomal dominant and late-onset Alzheimer disease. *Alzheimer's Association International Conference (AAIC)*
- 2013 Stamatios N Sotiropoulos, **Charlie Chen**, Krikor Dikranian, Saad Jbabdi, Timothy EJ Behrens, David C Van Essen, and Matthew F Glasser. Comparison of diffusion MRI predictions and histology in the macaque brain. *International Society for Magnetic Resonance in Medicine (ISMRM)*