

CURRICULUM VITÆ

Ken YOSHIDA

Department of Biomedical Engineering
Indiana University - Purdue University Indianapolis
723 W Michigan St., SL220
Indianapolis, IN 46202, United States
Ph: +1 (317) 274 9714 Email: yoshidak@iupui.edu

EDUCATION:

UNDERGRADUATE

University of California, San Diego	09.1984 - 06.1986
Pre-Applied Mechanics and Engineering Science	Transferred to UCLA in 1986
University of California, Los Angeles	09.1986 - 06.1989
BS Bioengineering with emphasis in biocybernetics	06.1989

GRADUATE

University of Utah, Department of Bioengineering	07.1989 - 12.1994
Functional Stimulation & Control of Skeletal Muscle	Advisor: Kenneth W. Horch
PhD Bioengineering	12.1994

POSTDOCTORAL

University of Alberta, Division of Neuroscience	12.1994 - 04.1998
Post-doctoral Fellow in Neuroscience	Advisor: Richard B. Stein
Aalborg University, Center for Sensory-Motor Interaction	05.1998 - 12.2000
Research Assistant Professor in Biomedical Engineering	Advisor: Thomas Sinkjær

ACADEMIC APPOINTMENTS:

Indiana University - Purdue University Indianapolis, U.S.A.

Department of Biomedical Engineering	
Professor	08.2021 - present
Associate Professor (Tenured)	06.2013 - 07.2021
Associate Professor (Without Tenure)	11.2006 - 05.2013
Department of Electrical and Computer Engineering	
Adjunct Professor	08.2021 - present
Adjunct Associate Professor	11.2008 - 07.2021

Purdue University, U.S.A.

Weldon School of Biomedical Engineering	
Professor (Courtesy)	08.2021 - 12.2021
Associate Professor (Courtesy)	11.2006 - 07.2021

Indiana University School of Medicine, U.S.A.

Department of Physical Medicine and Rehabilitation	
Adjunct Senior Scientist	09.2021 - present

Rehabilitation Hospital of Indiana, U.S.A.

Research Associate	2015 - 2019
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Aalborg University, Denmark

Department of Health Science and Technology (Biomedical Engineering)	
Lektor (Associate Professor, Tenured)	01.2001 - 10.2006
Center for Sensory - Motor Interaction	
Adjunkt (Assistant Professor)	2000 - 2001
Forskningsadjunkt (Research Assistant Professor)	1998 - 2000

University of Alberta, Canada

Division of Neuroscience	
Postdoctoral Fellow	1994 - 1998

LICENSURE, CERTIFICATION, SPECIALTY BOARD STATUS

Credential	Number	Inclusive Dates
Indiana State Controlled Substance Registrant	61100884B	2.2010 - present
US DEA Controlled Substance Registrant	RY0527878	4.2018 - present

PROFESSIONAL ORGANIZATION MEMBERSHIPS:

Organization	Rank	Inclusive Dates
Biomedical Engineering Society	Member	11.1989 – 2012
IEEE Engineering in Medicine and Biology Society	Member	9.1989 – 6.2012
	Senior Member	6.2012 – present
International Functional Electrical Stimulation Society	Charter Member	8.1995 – present
	Elected BoD Member	1.2009 – 12.2011
	Elected BoD Member	1.2017 – 12.2019
	Elected EB Member	1.2020 – present
	Founding Member	9.2018 - present
Society for Neuroscience	Member	3.1998 – present
Tau Beta Pi Engineering Honor Society	Member, CA-ε	1989 – present
	Faculty Advisor, TBZ	2011 – 2013
	Primary Faculty Advisor, TBZ	2013 – 2015
	Primary Faculty Advisor, IN-ζ	2015 – present
	Founding Member, Central IN Alumni Chapter	2017 – present
Sigma Xi Research Honor Society	Member	2020 – present
International Society of Electrophysiology and Kinesiology	Member	2022 - present

PROFESSIONAL HONORS AND AWARDS:

RESEARCH

Jack Perkins Prize (Best paper published in *Medical Engineering and Physics* in 2013)

Institute of Physics and Engineering in Medicine 1.9.2014

Young Investigator Award

Sygekassernes Helsefond 2003

Research Award

Hede Nielsen Familiensfond 2002

Student Paper competition finalist (Region 8)

IEEE-Engineering in Medicine and Biology Conference (Paris) 1993

RESEARCH / CREATIVE ACTIVITIES:

PRESENTATIONS

All (108) conference papers / abstracts listed below resulted in either a poster or platform presentation as noted. All with the exception of A6 (National) & A69 (Local) were presented at international conferences or meetings as listed.

INVITED PRESENTATIONS – RESEARCH (27 Total)

The localization of the presentation was defined by the scope / context of the meeting.

LOCAL

Indiana Center for Regenerative Medicine and Engineering Seminar **10.06.2019**

“Peripheral nerve bioelectric interfaces”

IUPUI BME Dept Graduate Seminar **19.09.2019**

“Design of peripheral nerve bioelectric interfaces: Is there rhyme or reason to how neural interfaces work?”

Toronto Rehabilitation Institute (KITE), Toronto, ON, Canada **25.04.2019**

Design of peripheral nerve bioelectric interfaces: Is there rhyme or reason to how neural interfaces work?

Indiana University Occupational Therapy Research Colloquium **27.10.2016**

“Evaluation of the effect of sensory feedback on phantom limb pain in multi-center clinical trials”

IUPUI BME Dept Graduate Seminar **03.04.2015**

“The strange and circuitous path of the Extended Analog Computer”

IUPUI BME Dept Graduate Seminar **24.04.2014**

“Thin-film multi-channel micro electrode arrays: A bidirectional neural interface for neurorehabilitation?”

IUPUI Biology Dept Seminar **30.1.2009**

“Neuroprosthetics: research at the neural-electronic interface”

REGIONAL

Mathematical Biosciences Institute Mini-workshop on Restoration of Movement Via Peripheral Nerve Stimulation, The Ohio State University **29.04.2008**

“Strategies in applied peripheral nerve stimulation”

NATIONAL

Society of Hispanic Professional Engineers 2013 National Meeting Indianapolis, IN **1.11.2013**

“Interfaces to the peripheral nervous system for restoring sensory and motor functions”

Rehabilitation Technology Seminar, Aalborg, Denmark, **11.04.2005**

“Electrodes and neural interfaces for the peripheral nervous system: challenges and developments”

Netværk Medicoteknik Conf.: Småt er godt eller Indlejrede Sensorer & Systemer **10.2004**

“Neural interfaces, natural sensors and implanted electrode systems”

INTERNATIONAL

Rehab Week 2019, Toronto, ON, Canada **06.2019**

Keynote: FES technologies in bioelectric medicines. “FES to bioelectronic medicines: neural interfaces and methods for the autonomic nervous system to effect changes to organ function”

Galvani Bioelectronics R&D Network Meeting, Nice, France **13.04.2018**

“Low frequency alternating current block”

Rehab Week 2017 Pre-conference Workshop, London, UK **16.7.2017**

“Evaluation of the effect of sensory feedback on phantom limb pain in multi-center clinical trials”

Glaxo Smith Kline, Bioelectronics R&D Network Meeting, San Diego, CA Optimization of electrode spacing and geometry - Stimulation	11.11.2016
2016 Conference of the International Functional Electrical Stimulation Society (IFESS2016) La Grande Motte, France Anniversary Session: "FES neural interfaces: Pushing ideas and models into prototypes"	8.6.2016
Glaxo Smith Kline Bioelectronics R&D Network Meeting, Atlanta, GA What is the required electrode architecture? Focus on electrode design, spacing	11.10.2015
IEEE - Engineering in Medicine and Biology Conference 2014 Chicago, IL Electronic Bio-interfaces (Invited Session) FC11: "Bioelectric interfaces for the peripheral nervous system"	29.08.2014
ICNR Pre-conference Workshop, Aalborg, Denmark "Electrophysiology, design and applications of invasive interfaces"	23.07.2014
Glaxo Smith Kline / NIH / DARPA Bioelectronic Medicines Summit, NYC, NY "Signal analysis and modeling for peripheral nerve recordings"	16-17.12.2013
Glaxo Smith Kline / NIH / DARPA Bioelectronic Medicines Webinar "Signal analysis and modeling for peripheral nerve recordings"	14.11.2013
DEMOVE Symposium, Göttingen, Germany "Thin-film multi-channel micro electrode arrays: A bidirectional neural interface for neurorehabilitation"	22.10.2013
Symposium on Advances in Neural Rehabilitation Engineering (ANRES) Aalborg, Denmark Keynote: Neural Interfaces. "Current challenges in interfaces for the peripheral nervous system"	25.08.2010
Symposium on Advances in Neural Rehabilitation Engineering (ANRES) Aalborg, Denmark "Peripheral neural interfaces for restoration of motor and sensory function"	24.08.2009
Biomedical Engineering Society 2007 Fall Meeting, Los Angeles, CA "Thin Film Longitudinal Intra-Fascicular Electrodes (tfLIFE): a multichannel peripheral nerve neural interface"	09.2007
International Conference on Rehabilitation Robotics 2007 (ICORR '07), Noordwijk, The Netherlands "Recording experience with the thin-film Longitudinal Intra-Fascicular Electrode, a multichannel peripheral nerve interface"	06.2007
Journées Bilan ROBEA 2005, Montpellier, France "Neural interfaces, natural sensors and closed loop control of FES"	3.2005

FUNDED GRANTS / FELLOWSHIPS IN RESEARCH:
28 total awards, \$3.5M / \$34M (Amount to KY / Total Project Award)

Cook Research Inc.	04/2021 - 09/2021
"Ultrasonic Characterization of Hydrogels"	
Yoshida (PI) Role: PI Status: Completed	\$1,000
NIH-R21- R21EB028469	07/2019 - 06/2023
"Reversible block of nerve conduction using low frequency alternating currents"	
Yoshida (PI) Role: PI Status: Active	\$630,000
DARPA D17PC00125 Sub #3396-DPA-2S/IU	07/2017 – 12/2020
"Flexible Low-Modulus Nanofiber-based TIME Nerve Interfaces – Option Period"	06/2019 - 12/2020
Luna Innovations (Prime) Role: Sub-PI Status: Completed	\$125,000
"Flexible Low-Modulus Nanofiber-based TIME Nerve Interfaces"	07/2017 - 05/2019
Luna Innovations (Prime) Role: Sub PI Status: Completed	\$374,000
GSK / Galvani Bioelectronics Exploratory Research Grant #100040339	08/2014 – 09/2019
"Low Frequency Alternating Current Block – Phase 2"	01/2019 – 09/2019
Yoshida (PI) Role: PI Status: Completed	\$74,000
"Low Frequency Alternating Current Block – Phase 1"	12/2017 – 12/2018
Yoshida (PI) Role: PI Status: Completed	\$42,500
"Qionics Subcontract"	02/2017 - 12/2017
Sarpeshkhar (PI) Role: Sub PI Status: Completed	\$39,600
"Unmyelinated nerve fiber recordings using a model-informed electrode design"	08/2014 – 12/2017
Yoshida (PI) Role: PI Status: Completed	\$270,000
European Commission FP7 HEALTH.2013.2.2.1-5 602547	09/2013 – 08/2017
"Natural sensory feedback for phantom limb pain modulation and therapy (EPIONE)"	
Jensen (Coordinator) Role: Co-PI Status: Completed	\$400k / \$7.5M (5.98M€)
NIH STTR Phase I R41AT008649-01A1	09/2014 – 08/2016
"Universal Amplifier System for High-fidelity Multi-modal Biosignal Recordings"	
WI Combs and Yoshida (Co PI) Role: Co PI Status: Completed	\$93,000 / \$257,000
NSF STTR Phase I IIP-1417062	07/2014 – 12/2015
"STTR Phase 1b: Extended Analog Computer Development as a Digitally Configurable, High Speed, High Order, and Low Power Analog Matched Filter"	
Mattes and Yoshida (Co PI) Role: Co PI Status: Completed	\$9,000 / \$30,000
"STTR Phase 1: Extended Analog Computer Development as a Digitally Configurable, High Speed, High Order, and Low Power Analog Matched Filter"	
Mattes and Yoshida (Co PI) Role: Co PI Status: Completed	\$108,000 / \$222,000
NIH R01 DC011759-01A1	04/2012 – 03/2017
"Challenges to vocal fold epithelia: functional and structural consequences"	
Sivasankar (PI) Role: Co-I Status: Completed	\$122,500
European Commission FP7-IDEAS-ERC 267888	03/2012 – 02/2016
"Decoding the Neural Code of Human Movements for a New Generation of Man machine Interfaces (REMOVE)"	
Farina (PI) Role: Co I Status: Completed	\$3,000 / \$3.2M (2.4M€)
IU Collaborative Research Grant Program	03/2011 – 09/2012
"Real-time multi-channel neural signal processor system"	
Yoshida (PI) Role: PI Status: Completed	\$30,000

NCRRN Foundation	05/2010 – 04/2011
“Transcranial Electrical Stimulation (TES) for mood, cognitive, sleep and pain disorders after Traumatic Brain Injury (TBI)”	
Malec (PI) Role: Co I Status: Completed	\$0 / \$46k
European Commission FP7 ICT 2007-2 224012	05/2008 – 04/2013
“Transverse, Intrafascicular Multichannel Electrode system for induction of sensation and treatment of phantom limb pain in amputees (TIME)”	
Jensen (Coordinator) Role: Co PI Status: Completed	\$0 / \$5.6M (3.65M€)
^aDanish High Technology Foundation	05/2006 – 05/2011
“Functional Electrical Stimulation”	
Struijk (Coordinator) Role: Co PI Status: Completed	\$305k / \$3.6M (20MDkk)
^aDanish Technical Research Council (STVF)	05/2005 – 05/2010
“Frame Project: Center for NeuroEngineering”	
Besenbacher (Coordinator) Role: Co PI Status: Completed	\$100,000 / \$3M (15MDkk)
^aEuropean Aeronautic Defense and Space Company (EADS)	2005 – 2008
“Natural sensor feedback on-line interpretation for skeletal muscle artificial control-Potential applicability of the proposed research work to aero-spatial domain”	
Azevedo-Coste, Yoshida (Co PI) Role: Co PI Status: Completed	\$125,000
^aEuropean Robotics Network FP6 EURON II, subproject	2005 – 2006
“Lower-extremity movement restoration through muscle closed-loop FES control using natural sensor feedback”	
Azevedo-Coste, Yoshida (Co PI) Role: Co PI Status: Completed	\$42,000
^aEuropean Commission FP5-IST-2001-35094	10/2004 – 10/2005
“Development of a CYBERnetic HAND Prosthesis (CYBERHAND)”	
Dario (PI) Role: Sub PI Status: Completed	\$46,000 / \$3.3M (2.5M€)
^aDanish Technical Research Council (STVF) - Type 2 Talent Project	1/2001 – 12/2003
“Flexible Thin-Film Penetrating Electrodes”	
Yoshida (PI) Role: PI Status: Completed	\$278,000 (2.23MDkk)
^aEuropean Commission FP5-IST-1999-10073	1/2001 – 1/2003
“Versatile System for Advanced Neuronal Recordings with Multisite Microelectrodes (VSAMUEL)”	
Hofmann (Coordinator) Role: Sub PI Status: Completed	\$242k / \$2M (1.87M€)
^aMedicotest A/S	1/2000 – 5/2000
“Development of an electrode impedance spectrometer”	
Yoshida (PI) Role: PI Status: Completed	\$40,000 (200k Dkk)
National Institutes of Health -	03/1996 – 03/1998
Hoffer (PI) Role: sub Co-I Status: Completed	\$35,000
Alberta Heritage Foundation for Medical Research	02/1995 – 02/1998
Postdoctoral Fellowship Role: Fellow Status: Completed	3yrs stipend
Canadian Network of Centres of Excellence, Neuroscience	12/1994 – 12/1997
Postdoctoral Fellowship Role: Fellow Status: Completed	3yrs stipend

PUBLICATIONS: † denotes publication as mentor, Underlined denotes student

OrCID: [0000-0003-4566-580X](https://orcid.org/0000-0003-4566-580X)

Web Of Science Researcher ID: [AAV-2990-2020](https://www.researcherid.com/rid/AAV-2990-2020)

Google Scholar: [XVo5SEgAAAAJ](https://scholar.google.com/citations?user=XVo5SEgAAAAJ)

MyNCBI: <https://www.ncbi.nlm.nih.gov/myncbi/ken.yoshida.1/bibliography/public/>

Book Chapters

- B8 **YOSHIDA, K.**, "Peripheral nerve signal processing, Denoising", in Encyclopedia of Computational Neuroscience 2nd Ed., Springer, D. Jaeger, R. Jung Eds., pp.2703-2706, 2022
[DOI: 10.1007/978-1-0716-1006-0](https://doi.org/10.1007/978-1-0716-1006-0)
- B7† COMOGLIO, C.C., MOSIER, K, **YOSHIDA, K.**, "Ch.1. - An Introduction to Phantom Limb Pain" in *Direct Nerve Stimulation for Induction of Sensation and Treatment of Phantom Limb Pain*, River Publishers, Jensen W, ed., 2019 (Chapter Submitted 5.2017, Final Revisions 8.2019, In Press 11.2019)
ISBN: 978-87-7022-076-7
- B6† **YOSHIDA, K.**, BERTRAM, M.J., COX, T.G.H., RISO, R.R., "Ch.2.6 - Peripheral nerve recording electrodes and techniques" in *Neuroprosthetics: Theory and Practice*, 2nd ed., Imperial College Press, Horch, K.W. and Dhillon, G.S. Eds., 2017 (Submitted 5.2016, Accepted 2.2017, In Press 5.2017)
[DOI: 10.1142/10368](https://doi.org/10.1142/10368)
- B5 **YOSHIDA, K.**, "Peripheral nerve signal processing, Denoising", in Encyclopedia of Computational Neuroscience, Springer, D. Jaeger, R. Jung Eds., pp.2308-2312, 2015
[DOI: 10.1007/978-1-4614-6675-8_215](https://doi.org/10.1007/978-1-4614-6675-8_215)
- B4† QIAO, S., MAUSER, K., **YOSHIDA, K.**, "Progress in peripheral neural prosthetics" in *Introduction to neural engineering for motor rehabilitation*, IEEE Press / J. Wiley Press, D. Farina, W. Jensen, M. Akay eds., 2013 (Submitted Jan 2011, Revised 9.2011, Accepted 7.2012, In-Press 10.2012)
ISBN: 978-0-470-91673-5
- B3 SINKJÆR, T., **YOSHIDA, K.**, JENSEN, W., SCHNABEL, V., "Electroneurography" in *Encyclopedia of Medical Devices and Instrumentation*, J Wiley Press, Webster J, ed., 2005.
[DOI: 10.1002/0471732877.emd098](https://doi.org/10.1002/0471732877.emd098)
- B2 **YOSHIDA, K.**, RISO, R., "Ch.4.3 - Peripheral nerve recording electrodes and techniques", in *Neuroprosthetics: Theory and Practice*, Imperial College Press, Horch, K.W. and Dhillon, G.S. Eds., 2004.
ISBN: 978-981-238-022-7
- B1 **YOSHIDA, K.**, STRUIJK, J.J., "Ch.2.2 - The theory of peripheral nerve recordings", in *Neuroprosthetics: Theory and Practice*, Imperial College Press, Horch, K.W. and Dhillon, G.S. Eds., 2004.
ISBN: 978-981-238-022-7

Invited Editorials

- E2 STREET, T., **YOSHIDA, K.**, SPAICH E.G., MILOSEVIC, M., "The International Functional Electrical Stimulation Society (IFESS): Current and Future Developments", *ArtifOrgans*, 2022
[DOI: 10.1111/aor.14325](https://doi.org/10.1111/aor.14325)
- E1 MICERA, S., NAVARRO, X., **YOSHIDA, K.**, "Guest Editorial Interfacing With the Peripheral Nervous System to Develop Innovative Neuroprostheses", *IEEEtNSRE*, 17(5), pp 417-419, 2009.
[DOI: 10.1109/tnsre.2009.2033426](https://doi.org/10.1109/tnsre.2009.2033426). PMID: 19899194.

Peer-Reviewed Journal Articles

- J65† HORN, M.R., VETTER, C., BASHIRULLAH, R., CARR, M, **YOSHIDA, K.**, "Characterization of the Electrical Properties of the Peripheral Nerve Laminae", (Submitted IEEEtBME 12.2020, Redirecting *ArtifOrgans Submitted 8.2022*)
- J64† SERGI, P.N., JENSEN, W., **YOSHIDA, K.**, "Geometrical characterization of local changes in tungsten microneedles tips after insertion into in vivo peripheral nerve", *Applied Sciences*, (Accepted 8.2022).
[DOI: 10.3390/app12188938](https://doi.org/10.3390/app12188938)
- J63† DOERING, O., VETTER, C.P., ALHAWWASH, A., HORN, M.R., **YOSHIDA, K.**, "Durable scalable 3D SLA-printed cuff electrodes with high performance carbon + PEDOT:PSS-based contacts", *ArtifOrgans*, 2022 (Submitted *ArtifOrgans* 2.2022, 5.2022, 8.2022, Accepted 8.2022)
[DOI: 10.1111/AOR.14387](https://doi.org/10.1111/AOR.14387)

- J62[†] LAZORCHAK, N., HORN, M.R., MUZQUIZ, M., MINTCH L., **YOSHIDA, K.**, "Accurate simulation of cuff electrode stimulation predicting in-vivo strength-duration thresholds", *ArtifOrgans*, 2022 (Submitted *ArtifOrgans* 2.2022, 5.2022, Accepted 6.2022)
DOI: [10.1111/AOR.14374](https://doi.org/10.1111/AOR.14374)
- J61[†] ALHAWWASH, A., MUZQUIZ, M., RICHARDSON, L., VETTER, C.P., SMOLIK, M., GOODWILL, A., **YOSHIDA, K.**, "In-vivo peripheral nerve activation using sinusoidal low frequency alternating currents", *ArtifOrgans*, 2022 ;00:1-11 (Submitted *ArtifOrgans* 2.2022, 5.2022, Accepted 6.2022)
DOI: [10.1111/AOR.14347](https://doi.org/10.1111/AOR.14347)
- J60[†] MUZQUIZ, I., RICHARDSON, L., VETTER, C., SMOLIK, C., ALHAWWASH, A., GOODWILL, A., BASHIRULLAH, R., CARR, M., **YOSHIDA, K.**, "In-vivo application of low frequency alternating currents on porcine cervical vagus nerve evokes reversible nerve conduction block", *Bioelectric Medicines*, 2021 (Submitted *JNE* 9.2020, *BEM*, 4.2021, Accepted: 6.2021)
DOI: [10.1186/s42234-021-00072-w](https://doi.org/10.1186/s42234-021-00072-w) PMID: 34187586; PMCID: PMC8243469.
- J59[†] MUZQUIZ, M.I., MINTCH, L., HORN, M.R., CARR, M., SCHILD, J.H., BASHIRULLAH, R., **YOSHIDA, K.**, "A Reversible Low Frequency Alternating Current Nerve Conduction Block Applied to Mammalian Autonomic Nerves", *Sensors*, 2021 (Submitted *SciRep* 9.2020, *Sensors* 4.2021, Accepted 6.2021)
DOI: [10.3390/s21134521](https://doi.org/10.3390/s21134521) PMID: 34282758; PMCID: PMC8271881.
- J58 ČVANČARA, P., BORETIUS, T., LÓPEZ-ÁLVAREZ, V., MACIEJASZ, P., ANDREU, D., RASPOPOVIC, S., PETRINI, F., MICERA, S., GRANATA, G., FERNANDEZ, E., ROSSINI, P., **YOSHIDA, K.**, JENSEN, W., DIVOUX, J-L, GUIRAUD, D., NAVARRO, X., STIEGLITZ, T., "Stability of Flexible Thin-Film Metallization Stimulation Electrodes: Analysis of Explants after First-in-Human Study and Improvement of *in-vivo* Performance", *JNE*, JNE-103599.R1, 2020 (Submitted 5.2020, Accepted 6.2020).
DOI: [10.1088/1741-2552/ab9a9a](https://doi.org/10.1088/1741-2552/ab9a9a) PMID: 32512544
- J57[†] QIAO, S., STIEGLITZ, T., **YOSHIDA, K.**, "Estimation of the Electrode-fiber Bioelectrical Coupling from Extracellularly Recorded Single Fiber Action Potentials", *IEEEtNSRE*, 24(9), pp 951-960, 2016.
DOI: [10.1109/TNSRE.2015.2489924](https://doi.org/10.1109/TNSRE.2015.2489924) PMID: 26469339
- J56 SERGI, P.N., JENSEN, W., **YOSHIDA, K.**, "Interactions among biotic and abiotic factors affect the reliability of tungsten microneedles puncturing in vitro and in vivo peripheral nerves: A hybrid computational approach", *Mat Sci Eng*, 59(2), pp 1089-1099, 2016.
DOI: [10.1016/j.msec.2015.11.022](https://doi.org/10.1016/j.msec.2015.11.022) PMID: 26652468.
- J55 MUCELI, S., POPPENDIECK, W., NEGRO, F., **YOSHIDA, K.**, HOFFMANN, K.P., BUTLER, J., GANDEVIA, S.C., FARINA, D., "Accurate and representative decoding of the neural drive to muscles in humans with multi-channel intramuscular thin-film electrodes", *J. Physiol*, 593(17), pp 3789-3804, 2015.
DOI: [10.1113/JP270902](https://doi.org/10.1113/JP270902) PMID: 26174910; PMCID: PMC4575568.
- J54 HARREBY, K.R., KUNDU, A., **YOSHIDA, K.**, BORETIUS, T., STIEGLITZ T., JENSEN, W., "Subchronic stimulation performance of Transverser Intrafascicular Multichannel Electrodes in the median nerve of the Gottingen minipig", *Artif Organs*, 39(2), pp E36-E48, 2015
DOI: [10.1111/aor.12347](https://doi.org/10.1111/aor.12347) PMID: 25053505.
- J53 KUNDU, A., HARREBY, K.R., **YOSHIDA, K.**, BORETIUS, T., STIEGLITZ T., JENSEN, W., "Stimulation selectivity of the 'Thin-Film Longitudinal Intrafascicular Electrode' (tlLIFE) and the 'Transverse Intrafascicular Multi-channel Electrode' (TIME) in the large nerve animal model", *IEEEtNSRE*, 22(2), pp. 400-410, 2014
DOI: [10.1109/TNSRE.2013.2267936](https://doi.org/10.1109/TNSRE.2013.2267936) PMID: 23799699.
- J52 POPPENDIECK W., MUCELI, S., WELSCH, C., KROB, M.O., SOSSALLA, A., **YOSHIDA, K.**, FARINA, D., HOFFMANN, K.P., "Development of multi-channel intramuscular EMG recording electrodes", *Biomed Tech (Berl)*, 58(Suppl 1), Epub 2013 Sep 7.
DOI: [10.1515/bmt-2013-4380](https://doi.org/10.1515/bmt-2013-4380). PMID: 24043094.
- J51 STIEGLITZ, T., BORETIUS, T., NAVARRO, X., BADIA, J., GUIRAUD, D., DIVOUX, J-L, MICERA, S., ROSSINI, P., **YOSHIDA, K.**, HARREBY, K., KUNDU, A., JENSEN, W., "Development of a neurotechnical system for relieving phantom pain using transversal intrafascicular electrodes (TIME)", *Biomedizinische Technik*, 57(6), pp. 457-465, 2012.
DOI: [10.1515/bmt-2011-0140](https://doi.org/10.1515/bmt-2011-0140) PMID: 23037514
- J50[†] QIAO, S., TORKAMANI-AZAR, M., SALAMA, P., **YOSHIDA, K.**, "Stationary Wavelet Transform and Higher Order Statistical Analyses of Intrafascicular Nerve Recordings", *JNE*, 9(5), 2012.
DOI: [10.1088/1741-2560/9/5/056014](https://doi.org/10.1088/1741-2560/9/5/056014) PMID: 23010694

- J49[†] QIAO S., ODOEMENE, O., YOSHIDA, K., "Determination of electrode to nerve fiber distance and nerve conduction velocity through spectral analysis of the extracellular action potentials recorded from earthworm giant fibers", *MBEC*,50(8), pp.867-875, 2012.
DOI: [10.1007/s11517-012-0930-8](https://doi.org/10.1007/s11517-012-0930-8) PMID: 22714669
- J48[†] QIAO, S., YOSHIDA, K., "Influence of unit distance and conduction velocity on the spectra of extracellular action potentials recorded with intrafascicular electrodes", *MEP*, 35(1), pp.116-124, 2012.
DOI: [10.1016/j.medengphy.2012.04.008](https://doi.org/10.1016/j.medengphy.2012.04.008) PMID: 22578931
- J47[†] KAMAVUAKO, E.N., FARINA, D., YOSHIDA, K., JENSEN, W., "Estimation of grasping force from features of intramuscular EMG signals with mirrored bilateral training", *ABME*, 40(3), pp. 648-56, 2012
DOI: [10.1007/s10439-011-0438-7](https://doi.org/10.1007/s10439-011-0438-7) PMID: 22006428.
- J46 MICERA, S.M., ROSSINI, P.M., RIGOSA, J., CITI, L., CARPANETO, J., RASPOPOVIC, S., TOMBINI, M., CIBRIANI, C., ASSENZA, G., CARROZZA, M.C., HOFFMANN, K.P., YOSHIDA, K., NAVARRO, X., DARIO, P., "Decoding of grasping information from neural signals recorded using peripheral intrafascicular interfaces", *JNER*, 8(53), 2011
DOI: [10.1186/1743-0003-8-53](https://doi.org/10.1186/1743-0003-8-53) PMID: 21892926; PMCID: PMC3177892.
- J45[†] SERGI, P-N, JENSEN, W., MICERA, S., YOSHIDA, K., "In-vivo interactions between tungsten microneedles and peripheral nerves", *Med Eng Phys*, 34(6):747-55, 2011
DOI: [10.1016/j.medengphy.2011.09.019](https://doi.org/10.1016/j.medengphy.2011.09.019) PMID: 22000163
- J44[†] EL MAKSSOUD, H., GUIRAUD, D., POIGNET, P., HAYASHIBE, M., WIEBER, P-B, YOSHIDA, K., AZEVEDO-COSTE, C., "Multiscale modeling of skeletal muscle properties and experimental validations in isometric conditions", *Biol Cybern*, 105(2):121-138,2011.
DOI: [10.1007/s00422-011-0445-7](https://doi.org/10.1007/s00422-011-0445-7) PMID: 21761241.
- J43[†] GENG, B., YOSHIDA, K., PETRINI, L., JENSEN, W., "Evaluation of sensation evoked by electrocutaneous stimulation on forearm in nondisabled subjects ", *JRRD*, 49(2), pp. 297- 308, 2012
DOI: [10.1682/JRRD.2010.09.0187](https://doi.org/10.1682/JRRD.2010.09.0187) PMID: 22773530.
- J42 ZHANG, Z-D, SVENDSEN, M., CHOY, J., SINHA, A., HUO, Y., YOSHIDA, K., MOLLOI, S., KASSAB, G., "A new method to measure coronary velocity and coronary flow reserve", *AJP-Heart & Circ Physiol*, 301(1), pp H21-H28, 2011
DOI: [10.1152/ajpheart.00080.2011](https://doi.org/10.1152/ajpheart.00080.2011) PMID: 21551277.
- J41[†] GENG, B., YOSHIDA, K., JENSEN, W., "Impacts of selected stimulation patterns on the perception threshold in electrocutaneous stimulation", *Journal Neural Engineering Rehabilitation*, 8(9), pp. 1-10, 2011.
DOI: [10.1186/1743-0003-8-9](https://doi.org/10.1186/1743-0003-8-9) PMID: 21306616; PMCID: PMC3045309.
- J40[†] PENNISI, C.P., DOLATSHAHI-PIROUZ, A., FOSS, M., CHEVALLIER, J., FINK, T., ZACHAR, V., BESENBACHER, F., YOSHIDA, K., "Nanoscale topography reduces fibroblast growth, focal adhesion size and migration-related gene expression on platinum surfaces" *Colloids Surf B Biointerfaces*, 85(2), pp. 189 – 97, 2011.
DOI: [10.1016/j.colsurfb.2011.02.028](https://doi.org/10.1016/j.colsurfb.2011.02.028) PMID: 21435850.
- J39 BORETIUS, T., BADIA, J., PASCUAL-FONT, A., SCHUETTLER, M., NAVARRO, X., YOSHIDA, K., STIEGLITZ, T., "A transverse intrafascicular multichannel electrode (TIME) to interface with the peripheral nerve", *J Biosens & Bioelectronics*, 26, pp.62-69, 2010.
DOI: [10.1016/j.bios.2010.05.010](https://doi.org/10.1016/j.bios.2010.05.010) PMID: 20627510.
- J38[†] DJILAS, M., AZEVEDO-COSTE, C., GUIRAUD, D., YOSHIDA, K., "Spike sorting of muscle spindle afferent nerve activity recorded with thin-film intrafascicular electrodes", *Comp Intel Neurosci*. 2010.
DOI: [10.1155/2010/836346](https://doi.org/10.1155/2010/836346) PMID: 20369071; PMCID: PMC2847763.
- J37 YOSHIDA, K, FARINA, D, AKAY M, JENSEN W, "Multi-channel intraneural and intramuscular techniques for multi-unit recording and use in active prostheses", *ProcIEEE*, 98(3), pp. 432 – 449, 2010.
DOI: [10.1109/JPROC.2009.2038613](https://doi.org/10.1109/JPROC.2009.2038613)
- J36 MICERA, S., CITI, L., RIGOSA, J., CARPANETO, J., RASPOPOVIC, S., DIPINO, G., ROSSINI, L., YOSHIDA, K., DARIO, P., ROSSINI, P.M., "Decoding information from neural signals recorded using intraneural electrodes: Towards the development of a neurocontrolled hand prosthesis", *ProcIEEE*, 98(3), pp. 407 - 417, 2010.
DOI: [10.1109/JPROC.2009.2038726](https://doi.org/10.1109/JPROC.2009.2038726)
- J35[†] KAMAVUAKO, N., JENSEN, W., YOSHIDA, K., KURSTJENS, M., FARINA, D., "A criterion for signal-based selection of wavelets for denoising intrafascicular nerve recordings", *J Neurosci Met*, 186(2), pp. 274 – 280, 2010.
DOI: [10.1016/j.jneumeth.2009.11.022](https://doi.org/10.1016/j.jneumeth.2009.11.022) PMID: 19962403.

- J34 **YOSHIDA, K.**, HENNINGS, K., KURSTJENS, G.A.M., “Experimental validation of the nerve conduction velocity selective recording technique using a multi contact cuff electrode”, *Med Eng Phys*, 31(10), pp 1261-1270, 2009.
DOI: [10.1016/j.medengphy.2009.08.005](https://doi.org/10.1016/j.medengphy.2009.08.005) PMID: 19762269.
- J33[†] **DJILAS, M.**, AZEVEDO-COSTE, C., GUIRAUD, D., **YOSHIDA, K.**, “Interpretation of muscle spindle afferent nerve response to passive muscle stretch recorded with thin-film longitudinal intrafascicular electrodes”, *IEEE TNSRE*, 17(5), pp. 445-453, 2009.
DOI: [10.1109/TNSRE.2009.2032286](https://doi.org/10.1109/TNSRE.2009.2032286) PMID: 19775988.
- J32[†] **PENNISI, C.P.**, SEVCENCU, C., **DOLATSHAHI-PIROUZ, A.**, FOSS, M., HANSEN, J.L., LARSEN, A. N., ZACHAR, V., BESENBACHER, F., **YOSHIDA, K.**, “Responses of fibroblasts and glial cells to nanostructured platinum surfaces”, *Nanotech.*, 20(38), 2009.
DOI: [10.1088/0957-4484/20/38/385103](https://doi.org/10.1088/0957-4484/20/38/385103) PMID: 19713588.
- J31[†] **KAMAVUAKO, E.**, FARINA, D., **YOSHIDA, K.**, JENSEN, W., Relationship between grasping force and features of single-channel intramuscular EMG signals”, *J NeusciMeth.*, 185(1), pp143-150, 2009.
DOI: [10.1016/j.jneumeth.2009.09.006](https://doi.org/10.1016/j.jneumeth.2009.09.006) PMID: 19747943.
- J30[†] **DOLATSHAHI-PIROUZ, A.**, **PENNISI, C.P.**, SKELDAL, S., FOSS, M., CHEVALLIER, J., ZACHAR, V., ANDREASEN, P., **YOSHIDA, K.**, BESENBACHER, F., “The influence of glancing angle deposited nano-rough platinum surfaces on the adsorption of fibrinogen and the proliferation of primary human fibroblasts”, *Nanotech*, 20(9), pp.1-9, 2009.
DOI: [10.1088/0957-4484/20/9/095101](https://doi.org/10.1088/0957-4484/20/9/095101) PMID: 19417476.
- J29[†] **KAMAVUAKO, E.N.**, **YOSHIDA, K.**, JENSEN, W., “Variance-based signal conditioning technique: Comparison to a wavelet-based technique to improve spike detection in multiunit intrafascicular recordings”, *Biomedical Signal Processing and Control*, 4(2), pp 118-126, 2009.
DOI: [10.1016/j.bspc.2009.01.006](https://doi.org/10.1016/j.bspc.2009.01.006)
- J28[†] **PENNISI, C.P.**, JENSEN P.E., ZACHAR, V., GREENBAUM, E., **YOSHIDA, K.**, “Incorporation of photosynthetic reaction centers in the membrane of human cells: toward a new tool for optical control of cell activity.”, *Cellular and Molecular Bioengineering.*, 2(1), pp. 156-165, 2009.
DOI: [10.1007/s12195-008-0040-8](https://doi.org/10.1007/s12195-008-0040-8)
- J27[†] **PENNISI, C.P.A.**, GREENBAUM, E., **YOSHIDA, K.**, “Analysis of light-induced transmembrane ion gradients and membrane potential in Photosystem I proteoliposomes”, *Biophysical Chem.*, 146(1), pp13-24, 2010.
DOI: [10.1016/j.bpc.2009.09.013](https://doi.org/10.1016/j.bpc.2009.09.013) PMID: 19854559.
- J26[†] **CITI, L.**, CARPANETO, J., **YOSHIDA, K.**, HOFFMANN, K.P., KOCH, K.P., DARIO, P., MICERA, S., “On the use of wavelet denoising and spike sorting techniques to process ENG signals recorded using intra-neural electrodes”, *J. Neu. Sci. Meth.*, 172, pp.294-302, 2008.
DOI: [10.1016/j.jneumeth.2008.04.025](https://doi.org/10.1016/j.jneumeth.2008.04.025) PMID: 18534683.
- J25 **KJÆRGAARD, B.**, **YOSHIDA, K.**, CHRISTENSEN, T., **TOSATO, M.**, “Ordinary surface ECG electrodes accurately reflect cardiac electric activity at hypothermia” *Eur. J. Emerg. Med.*, 15(5):256-260, Oct 2008.
DOI: [10.1097/MEJ.0b013e3282f542d4](https://doi.org/10.1097/MEJ.0b013e3282f542d4) PMID: 18784503.
- J24[†] SEVCENCU, C., **PENNISI, C.P.**, **YOSHIDA, K.**, GREGERSEN, H. “Simultaneous monitoring of cellular depolarization and contraction – a new method to investigate excitability and contractility in isolated smooth muscle cells”, *Am J Phys - Gastrointestinal and Liver Physiology*, 294(3), pp.648-654, 2008.
DOI: [10.1152/ajpgi.00040.2007](https://doi.org/10.1152/ajpgi.00040.2007) PMID: 18187522.
- J23 **FARINA, D.**, **YOSHIDA, K.**, STIEGLITZ, T., KOCH, K.P., “Multi-Channel Thin-Film Electrode for Intramuscular Electromyographic Recordings”, *J App. Physiol.*, 104(3), pp.821-827, 2008.
DOI: [10.1152/jappphysiol.00788.2007](https://doi.org/10.1152/jappphysiol.00788.2007) PMID: 18048591.
- J22 **MICERA.S.**, NAVARRO, X, CARPANETO, J., **CITI, L.**, TONET, O., ROSSINI, P.M. ,CARROZZA, M.C., HOFFMANN, K.-P., VIVO, M., **YOSHIDA, K.**, DARIO, P., “On the use of longitudinal intrafascicular peripheral interfaces for the control of cybernetic hand prostheses in amputees”, *IEEE Trans NSRE*, 16(5), pp. 453-472, 2008.
DOI: [10.1109/TNSRE.2008.2006207](https://doi.org/10.1109/TNSRE.2008.2006207) PMID: 18990649.
- J21[†] **PENNISI, C.P.**; GREENBAUM, E. & **YOSHIDA, K.** “Spatial Distribution of the Electric Potential from Photosystem I Reaction Centers in Lipid Vesicles”, *IEEE Trans NanoBioscience*, 7(2), pp.164-171, 2008.
DOI: [10.1109/TNB.2008.2000748](https://doi.org/10.1109/TNB.2008.2000748) PMID: 18556264.

- J20[†] TOSATO, M., YOSHIDA, K., TOFT, E., STRUIJK, J.J., “Quasi-trapezoidal pulses to selectively block activation of intrinsic laryngeal muscles during vagal nerve stimulation”, *J. Neural Engineering*, 4(3), pp.205-212, 2007.
DOI: [10.1088/1741-2560/4/3/005](https://doi.org/10.1088/1741-2560/4/3/005) PMID: 17873422.
- J19[†] YOSHIDA, K., LEWINSKY, I., NIELSEN, M., HYLLEBERG, M., “Implantation mechanics of tungsten microneedles into peripheral nerve trunks”, *Med Biol Eng Comp*, 45(4), pp.413-20, 2007.
DOI: [10.1007/s11517-007-0175-0](https://doi.org/10.1007/s11517-007-0175-0) PMID: 17333101.
- J18[†] BOSSI, S., MENCIASSI, A., KOCH, K.P., HOFFMANN, K.P., YOSHIDA, K., DARIO, P., MICERA, S., “Shape memory alloy microactuation of tf-LIFEs: preliminary results”, *IEEE Trans. Biomed*, 54(6 Pt 1), pp.1115-20, 2007.
DOI: [10.1109/TBME.2007.895186](https://doi.org/10.1109/TBME.2007.895186) PMID: 17554830.
- J17[†] LAGO, N., YOSHIDA, K., KOCH, K.P., NAVARRO, X., “Assessment of biocompatibility of chronically implanted polyimide and platinum intrafascicular electrodes”, *IEEE Trans. Biomed*, 54(2), pp.281-90, 2007.
DOI: [10.1109/TBME.2006.886617](https://doi.org/10.1109/TBME.2006.886617) PMID: 17278585.
- J16[†] TOSATO M, YOSHIDA K, TOFT E, NEKRASAS V, STRUIJK JJ., “Closed-loop control of the heart rate by electrical stimulation of the vagus nerve”, *Med Biol Eng Comput.*, 44(3), pp.161-9, 2006.
DOI: [10.1007/s11517-006-0037-1](https://doi.org/10.1007/s11517-006-0037-1) PMID: 16937157.
- J15[†] LIAO, D., SEVCENCUCU, C., YOSHIDA, K., GREGERSEN, K., “Viscoelastic properties of isolated rat colon smooth muscle cells”, *Cell Biol Int*, 30(10), pp. 854-858, 2006.
DOI: [10.1016/j.cellbi.2006.05.012](https://doi.org/10.1016/j.cellbi.2006.05.012) PMID: 16815715.
- J14[†] JENSEN, W., YOSHIDA, K., HOFMANN, U.G., “In-vivo implant mechanics of flexible, silicon-based ACREO microelectrode arrays in rat cerebral cortex”, *IEEE Trans. Biomed*, 53(5), pp. 934-940, 2006.
DOI: [10.1109/TBME.2006.872824](https://doi.org/10.1109/TBME.2006.872824) PMID: 16686416.
- J13[†] MAW S., SMELA, E., YOSHIDA, K., STEIN, R.B., “Effects of monomer and electrolyte concentrations on actuation of PPy(DBS) bilayers”, *Synthetic Metals*, 155(1), pp.18-26, 2005.
DOI: [10.1016/j.synthmet.2005.05.017](https://doi.org/10.1016/j.synthmet.2005.05.017)
- J12 HOFMANN, U.G., FOLKERS, A., MÖSCH, F., MALINA, T., MENNE, K., KINDLUNDH, M.G., NORLIN, P., DE CURTIS, M., BIELLA, G., FAGERSTEDT, P., DESCHUTTER, E., JENSEN, W., YOSHIDA, K., HOEHL, D., THOMAS, U., “A novel high channel-count system for acute multisite neuronal recordings”, *IEEE Trans. Biomed Eng.*, 53(8), pp. 1672-1677, 2006.
DOI: [10.1109/TBME.2006.877807](https://doi.org/10.1109/TBME.2006.877807) PMID: 16916102.
- J11[†] PATRICIU A., YOSHIDA, K., STRUIJK, J.J., DEMONTE T.P., JOY, M.L.G. “Current density imaging and electrically induced skin burns under surface electrodes”, *IEEE Trans. Biomed. Eng.*, 52(12), pp.2024-2031, 2005.
DOI: [10.1109/TBME.2005.857677](https://doi.org/10.1109/TBME.2005.857677) PMID: 16366226.
- J10[†] LAWRENCE, SM, DHILLON, GS, JENSEN, W, YOSHIDA, K, HORCH, KW, “Acute peripheral nerve recording characteristics of polymer-based longitudinal intrafascicular electrodes”, *IEEE Trans. Neural Sys Rehab Eng*, 12(3), pp. 345-348, 2004.
DOI: [10.1109/TNSRE.2004.831491](https://doi.org/10.1109/TNSRE.2004.831491) PMID: 15473197.
- J9 NORLIN, P., KINDLUNDH, M., MOURoux, A., YOSHIDA, K., HOFMANN, U.G., “A 32-site neural recording probe fabricated by DRIE of SOI Substrates”, *Journal of Micromechanics and Microengineering*, 12, pp.414-419, 2002.
DOI: [10.1088/0960-1317/12/4/312](https://doi.org/10.1088/0960-1317/12/4/312)
- J8 MAW, S., SMELA, E., YOSHIDA, K., SOMMER-LARSEN, P., STEIN, R.B., “The effects of varying deposition current density on bending behaviour in PPy(DBS)-actuated bending beams”, *Sensors and Actuators, A. Physical*, 89, pp.175-184, 2001.
DOI: [10.1016/S0924-4247\(00\)00512-4](https://doi.org/10.1016/S0924-4247(00)00512-4)
- J7 YOSHIDA, K., JOVANOVIĆ, K., STEIN, R.B., “Intrafascicular electrodes for stimulation and recording from mudpuppy spinal roots”, *J. Neuroscience Methods*, 96, pp. 47-55, 2000.
DOI: [10.1016/S0165-0270\(99\)00176-4](https://doi.org/10.1016/S0165-0270(99)00176-4) PMID: 10704670.
- J6 YOSHIDA, K., STEIN, R.B., “Characterization of signals and noise rejection with bipolar longitudinal intrafascicular electrodes”, *IEEE Trans. Biomed. Eng.*, 46(2), pp. 226-234, 1999.
DOI: [10.1109/10.740885](https://doi.org/10.1109/10.740885) PMID: 9932344.

- J5 JOVANOVIĆ, K., CHENG, J., **YOSHIDA, K.**, STEIN, R.B., "Localization and modulation of rhythmogenic locomotor network in the mudpuppy (*necturus maculatus*)", *Annals of the New York Academy of Sciences*, 860, pp. 480-482, 1998.
DOI: [10.1111/j.1749-6632.1998.tb09082.x](https://doi.org/10.1111/j.1749-6632.1998.tb09082.x) PMID: 10026083.
- J4 CHENG, J., STEIN, R.B., JOVANOVIĆ, K., **YOSHIDA, K.**, BENNETT, D.J., HAN, Y., "Identification, localization, and modulation of neural networks for walking in the mudpuppy (*necturus maculatus*) spinal cord", *J. Neurosci.*, 18(11), pp. 4295-4304, 1998.
PMID: 9592106; PMCID: PMC6792799.
- J3 **YOSHIDA, K.**, HORCH, K.W., "Closed-loop control of ankle position using muscle afferent feedback with functional neuromuscular stimulation", *IEEE Trans. Biomed. Eng.*, 43(2), pp. 167-176, 1996.
DOI: [10.1109/10.481986](https://doi.org/10.1109/10.481986) PMID: 8682528.
- J2 **YOSHIDA, K.**, HORCH, K.W., "Reduced fatigue in electrically stimulated muscle using dual channel intrafascicular electrodes with interleaved stimulation", *Ann. Biomed. Eng.*, 21(6), pp.709-714, 1993.
DOI: [10.1007/BF02368649](https://doi.org/10.1007/BF02368649) PMID: 8116921.
- J1 **YOSHIDA, K.**, HORCH, K.W., "Selective stimulation of peripheral nerve fibers using dual intrafascicular electrodes", *IEEE Trans. Biomed. Eng.*, 40(5), pp. 492-494, 1993.
DOI: [10.1109/10.243412](https://doi.org/10.1109/10.243412) PMID: 8225338.

Conference Papers (≥2 Pages) / Abstracts (≤1 Page)

- A108[†] JOHNSON, T., PARKS, J., BEARD, A., **YOSHIDA, K.**, (2022) "Towards in-situ monitoring of electrode health during low frequency alternating current stimulation", Ann Meeting of the BMES, San Antonio, TX (8.2022 Submitted, Accepted, Poster)
- A107[†] BEARD, A., JOHNSON, T., PARKS, J., **YOSHIDA, K.**, (2022) "Towards in-situ chemoelectric monitoring of electrode contact health during low frequency alternating current neuromodulation", IMPRS Symposium, IU School of Medicine (7.2022 Presented Poster)
- C106[†] LAZORCHAK, N., HORN, M.R., **YOSHIDA, K.**, (2022), "Low frequency alternating current block-activation window: *In-silico* predictions", RehabWeek 2022, Rotterdam, Netherlands (3.2022 Submitted, Accepted, 7.2022 Presented Poster)
- A105[†] HORN, M.R., ALHAWWASH, A., **YOSHIDA, K.**, (2022), "*In-vivo* measurement of the Block-Activation Window for sinusoidal Low Frequency Alternating Current (LFAC) stimulation", ISEK 2022, Quebec, PQ, Canada, (1.2022 Submitted, 6.2022 Presented Poster)
- C104[†] ALHAWWASH, A., MUZQUIZ, M.I., RICHARDSON L., VETTER, C., SMOLIK, M., GOODWILL, A., **YOSHIDA, K.**, (2021), "In-vivo peripheral nerve activation using sinusoidal low frequency alternating currents", IFESS2021, Rovinj, Croatia, Virtual (08.2021 Submitted, 15.9.2021 Accepted, 9.2021 Presented Oral)
- A103[†] DILLON, A., VETTER, C., **YOSHIDA, K.**, (2021), "Effect of percolation ratio on the electrical conductivity of cyanoacrylate bound carbon graphite electrodes", INDI REU Symposium, Indianapolis, IN, (Poster), Council on Undergraduate Research (CUR) 2021 Research Experiences for Undergraduates (REU) Symposium, Virtual, (08.2021 Submitted, 09.2021 Accepted, 10.2021 Presented Oral).
- C102[†] LAZORCHAK, N., HORN, M.R., MUZQUIZ, M.I., MINTCH, L.M., **YOSHIDA, K.**, (2021), "Accurate simulation of cuff electrode stimulation predicting *in-vivo* strength-duration thresholds", IFESS2021, Rovinj, Croatia, Virtual (08.2021 Submitted, Accepted, 9.2021 Presented Oral)
- C101[†] VETTER, C.P., PARKS, J., JOHNSON, T., **YOSHIDA, K.**, (2021), "Novel high performance poly(3,4-ethylenedioxythiophene) : polystyrene sulfonate (PEDOT:PSS) + carbon-black based bioelectric interface", RehabWeek 2021, Virtual (08.2021 Submitted, Accepted, 9.2021 Presented Oral)
- C100[†] DOERING, O.M., VETTER, C.P., **YOSHIDA, K.**, (2021) "C-Cuff electrodes: An updated durable 3D SLA printed cuff electrode", RehabWeek 2021, Virtual (08.2021 Submitted, Accepted, 9.2021 Presented Oral)
- A99[†] HORN, M.R., LAZORCHAK, N., ALHAWWASH, A., **YOSHIDA, K.**, (2021) "*In-silico* model of the Low Frequency Alternating Block - Activation Window", Minnesota Neuromodulation Symposium 2021, Virtual (04.2021 Submitted, 04.2021 Accepted, 6.2021 Presented Virtual Oral)
- A98[†] ALHAWWASH, A., HORN, M.R., **YOSHIDA, K.**, (2021) "Activation of Peripheral Nerves Using Low Frequency Alternating Currents", Minnesota Neuromodulation Symposium 2021, Virtual (04.2021 Submitted, 04.2021, 6.2021 Presented Virtual Oral)
- C97 LONTIS, E.R., **YOSHIDA, K.**, JENSEN, W., (2020) "Referred sensation areas in a bilateral toes amputee" IEEE-EMBC 2020, Montreal, Canada, (01.2020 Submitted, 04.2020 Accepted, Poster)
DOI: 10.1109/EMBC44109.2020.9175667. PMID: 33018774.

- C96 LONTIS, E.R., **YOSHIDA, K.**, JENSEN, W., (2019) “Referred sensation areas in transpelvic amputee” IEEE-EMBC 2019, Berlin, Germany, (02.2019 Submitted, 05.2019 Accepted, Poster)
DOI: 10.1109/EMBC.2019.8856724. PubMed PMID: 31947321.
- C95 LONTIS, E.R., **YOSHIDA, K.**, JENSEN, W., (2019) “Referred sensation areas in transpelvic amputee” IEEE-RehabWeek 2019, Toronto, ON, Canada, (02.2019 Submitted, 03.2019 Accepted, Poster)
- A94[†] MUZQUIZ, M.I., HORN, M.R., MINTCH, L.R., SCHILD, J.H., **YOSHIDA, K.**, (2019) “Characterization of the Electrode Sensitivity Function for Autonomic Nerve”, RehabWeek 2019, Toronto, ON, Canada (02.2019 Submitted, 03.2019 Accepted, Poster)
- C93[†] MINTCH, L.M., MUZQUIZ, I., HORN, R.M., CARR, M., SCHILD, J.H., **YOSHIDA, K.**, (2019) “Reversible Conduction Block in Peripheral Mammalian Nerve Using Low Frequency Alternating Current” NER2019, San Francisco, CA, (11.2018 Submitted, 12.2018 Accepted, Poster)
- C92[†] HORN, R.M., AHMED, C., **YOSHIDA, K.**, (2019) “Low Frequency Alternating Current Block - A New Method to Stop or Slow Conduction of Action Potentials”, NER2019, San Francisco, CA, (11.2018 Submitted, 12.2018 Accepted, Poster)
- C91 SERGI, P-N, JENSEN, W., **YOSHIDA, K.**, MICERA, S., (2018) “Hybrid and Fast: A Novel in Silico Approach with Reduced Computational Cost to Predict Failures of in Vivo Needle-Based implantations”, ICNR2018, Pisa, Italy (Poster)
DOI: 10.1007/978-3-030-01845-0_25
- C90[†] RICHARDSON, L., AHMED, C., SMOLIK, M., **YOSHIDA, K.**, (2018) “3D printed hinged multi-contact cuff electrodes for rapid prototyping and testing”, IFESS2018, Nottwil, Switzerland (Platform)
- C89 HORN, M.R., HOLINSKY, B., STRUIJK, J.J., ALFREY, K.D., SCHILD, J.H., **YOSHIDA, K.**, (2018) “In-silico biophysical myelinated and unmyelinated autonomic nerve fiber models”, IFESS2018, Nottwil, Switzerland (Platform)
- C88 LONTIS, R., **YOSHIDA, K.** JENSEN, W., (2018) “Features of Referred Sensation Areas for Artificially Generated Sensory Feedback - A Case Study”, 2018 IEEE-EMBC, Honolulu, HI (4.2018, accepted, Poster)
DOI: 10.1109/EMBC.2018.8512934. PubMed PMID: 30441141.
- A87 **YOSHIDA, K.**, (2016) “Optimization of electrode spacing and geometry - Stimulation”, GSK Bioelectronics R&D Network Meeting, San Diego, CA (Platform)
- C86[†] **YOSHIDA, K.**, MALEC, J., COMOGGIO, C., MOSIER, K., LONTIS, R., LARSEN, K., NAVARRO, X., JENSEN, W., (2017) “Evaluation of the effect of sensory feedback on phantom limb pain in multi-center clinical trials”, in *Converging clinical and engineering research in neurorehabilitation II*, Springer Press, Ibáñez J., González-Vargas J., Azorín J., Akay M., Pons J. Eds., pp.725-730, 2017 (Platform)
DOI: 10.1007/978-3-319-46669-9_119
- A85[†] **YOSHIDA, K.**, HORN, M.R., BERTRAM, M.J., COX, T.H., SCHILD, J., (2016) “Unmyelinated nerve fiber recordings using a model-informed electrode design”, GSK Bioelectronics R&D Network Meeting, San Diego, CA (Poster)
- A84[†] **YOSHIDA, K.**, MALEC, J., COMOGGIO, C., MOSIER, K., LONTIS, R., LARSEN, K., NAVARRO, X., JENSEN, W., (2016) “Evaluation of the effect of sensory feedback on phantom limb pain in multi-center clinical trials”, *International Conference on Neurorehabilitation (ICNR2016)*, Segovia, Spain. (Platform)
- A83 **YOSHIDA, K.**, (2015) “What is the required electrode architecture? Focus on electrode design, spacing”, GSK Bioelectronics R&D Network Meeting, Atlanta, GA. (Platform)
- A82[†] **YOSHIDA, K.**, HORN, M.R., BERTRAM, M.J., COX, T.H., SCHILD, J., (2015) “Unmyelinated nerve fiber recordings using a model-informed electrode design”, GSK Bioelectronics R&D Network Meeting, Atlanta, GA. (Poster)
- C81[†] ELKINS, J., HOSSAIN, G., **YOSHIDA, K.**, (2015) “Multinomial Processing Models in Visual Cognitive Effort Diagnostics”, *Functionality, Physics, Intentionality and Causality (FPIC2015) at the Vision Meets Cognition Workshop, in conjunction with CVPR2015*, Los Angeles, CA. (Poster)
- C80[†] ELKINS, J., HOSSAIN, G., **YOSHIDA, K.**, (2015) “Neural mechanisms of pupillary dynamics and cognitive effort”, CNS2015, San Francisco, CA. (Poster)
- C79[†] HORN, M.R., QIAO, S., STRUIJK, J.J., **YOSHIDA, K.**, (2015) “Origins of extracellularly recorded monophasic single unit action potentials in the peripheral nerve”, IEEE NER, Montpellier, France. (Platform)
- C78[†] HORN, M.R., KEMP, A., YONG, K., CHOI, J., NAM, S., **YOSHIDA, K.**, (2015) “Demonstration of graphene microelectrodes as a bioelectronic interface”, 2015 World Congress on Medical Physics and Biomedical Engineering, Toronto, ON. (Platform)

- A77[†] **YOSHIDA, K.**, **HORN, M.R.**, **BERTRAM, M.J.**, **SCHILD, J.**, (2014) “Unmyelinated nerve fiber recordings using a model-informed electrode design”, GSK Bioelectronics R&D Network Meeting, Raleigh, NC. (Platform)
- C76[†] **YOSHIDA, K.**, **STIEGLITZ, T.**, **QIAO, S.**, (2014) “Bioelectric Interfaces for the Peripheral Nervous System”, *36th Annual International IEEE EMBS Conference*, Chicago, IL (accepted 14.7.14, Poster). doi: 10.1109/EMBC.2014.6944815. PMID: 25571183
- C75[†] **QIAO, S.**, **YOSHIDA, K.**, (2013) “Identification of Spectral Landmarks on the Single Fiber Action Potential Waveform for Unit Tracking”, *IEEE-NER*, San Diego, CA (accepted 1.8.13, Poster).
- C74[†] **HORN, R.**, **QIAO, S.**, **YOSHIDA, K.**, (2013) “Effect of the nerve fiber path eccentricity on the single fiber action potential”, *IEEE-NER*, San Diego, CA (accepted 1.8.13, Poster).
- C73 **HARREBY, K.R.**, **KUNDU, A.**, **MACIEJASZ, P.**, **GUIRAUD, D.**, **STIEGLITZ, T.**, **BORETIUS, T.**, **YOSHIDA, K.**, **JENSEN, W.**, (2012) “Improvement of recruitment selectivity of time by paired implantation”, *IFESS2012*, Banff, AB. (Poster)
- C72 **BORETIUS, T.**, **YOSHIDA, K.**, **BADIA, J.**, **HARREBY, K.**, **KUNDU, A.**, **NAVARRO, X.**, **JENSEN, W.**, **STIEGLITZ, T.**, (2012) “A transverse intrafascicular multichannel electrode (time) to treat phantom limb pain – towards human clinical trials”, *BioRob 2012*, Rome, IT (submitted 31.1.12)
- A71[†] **QIAO, S.**, **ODOEMENE, O.**, **YOSHIDA, K.**, (2012) “Method for identification of nerve fiber distance and conduction velocity through spectral analysis of extracellularly recorded action potentials”, *Sigma Xi graduate student research awards competition poster session*, Purdue University, West Lafayette, IN (submitted 31.1.12, Poster)
- A70[†] **GENG, B.**, **YOSHIDA, K.**, **JENSEN, W.**, (2011) “A case study on phantom sensation and sensory discrimination induced by electrocutaneous stimulation”, *Neuroscience 2011*, Washington DC, 897.18/GG32 (Poster).
- A69[†] **HARREBY, K.R.**, **KUNDU, A.**, **BORETIUS, T.**, **YOSHIDA, K.**, **JENSEN, W.**, (2011) “Evaluation of the stimulation selectivity of transverse intrafascicular multichannel electrodes in the chronic Gottingen mini-pig – preliminary results”, *Neuroscience 2011*, Washington DC, 495.23/TT15 (Poster)
- A68[†] **KUNDU, A.**, **HARREBY, K.R.**, **KURSTJENS, M.**, **BORETIUS, T.**, **STIEGLITZ, T.**, **YOSHIDA, K.**, **JENSEN, W.**, (2011) “Comparison of acute stimulation selectivity of transverse and longitudinal intrafascicular electrodes in pigs”, *Neuroscience 2011*, Washington DC, 495.07/SS31 (Poster)
- C67[†] **CITI, L.**, **DJILAS, M.**, **AZEVEDO-COSTE, C.**, **YOSHIDA, K.**, **BROWN, E.N.**, **BARBIERI, R.**, (2011) “Point-process analysis of neural spiking activity of muscle spindles recorded from thin-film longitudinal intrafascicular electrodes”, *EMBC 2011*, Boston, MA.
- C66[†] **GENG, B.**, **HARREBY, K.R.**, **KUNDU, A.**, **YOSHIDA, K.**, **BORETIUS, T.**, **STIEGLITZ, T.**, **PASSAMA, R.**, **GUIRAUD, D.**, **DIVOUX, J.L.**, **BENVENUTO, A.**, **DIPINO, G.**, **ROSSINI, P.M.**, **JENSEN, W.**, (2011) “Development of a Psychophysical Testing Platform – a computerized tool to control, deliver and evaluate electrical stimulation to relieve phantom limb pain”, *Nordic-Baltic Conf on BME and Medical Phys*, Aalborg, Denmark.
- C65 **Jensen, W.**, **Micera, S.**, **Navarro, X.**, **Stieglitz, T.**, **Guiraud, D.**, **Divoux, J.L.**, **Rossini, P.M.**, **Yoshida, K.**, “Development of an implantable transverse intrafascicular multichannel electrode (TIME) system for relieving phantom limb pain”, *Ann Int Conf IEEE Eng Med Biol Soc*, 2010:6214-7. DOI: 10.1109/IEMBS.2010.5627733. PubMed PMID: 21097162.
- C64[†] **QIAO, S.**, **YOSHIDA, K.**, (2010) “Development of a method for estimating unit conduction velocity using spectral analysis of the action potential”, *IFESS2010*, Vienna Austria, paper 22.
- C63[†] **GENG, B.**, **YOSHIDA, K.**, **JENSEN, W.**, (2010) “Effects of the number of pulses on evoked sensations in pairwise electrocutaneous stimulation”, *IFESS2010*, Vienna Austria, paper 67.
- C62[†] **KUNDU, A.**, **JENSEN, W.**, **KURSTJENS, M.**, **STIEGLITZ, T.**, **BORETIUS, T.**, **YOSHIDA, K.**, (2010) “Dependence of implantation angle of the transverse, intrafascicular electrode (TIME) on selective activation of pig forelimb muscles”, *IFESS2010*, Vienna Austria, paper 92.
- A61[†] **QIAO, S.**, **YOSHIDA, K.**, (2010) “Electrode-fiber distance and active unit conduction velocity estimation”, *IUPUI Campus research day*, Indianapolis, IN. (submitted 3.2010)
- C60[†] **KUNDU, A.**, **JENSEN, W.**, **YOSHIDA, K.**, (2010) “Estimation of fascicle count and diameter in pig median and ulnar peripheral nerves”, *ISEK2010*, Aalborg, Denmark. (submitted 2.10)
- C59[†] **GENG, B.**, **YOSHIDA, K.**, **JENSEN, W.**, (2010) “Psychophysical evaluation of the effect of electrode location on sensations during electrocutaneous stimulation”, *ISEK2010*, Aalborg, Denmark. (submitted 1.10)

- C58[†] KAMAVUAKO, E.N., FARINA, D., **YOSHIDA, K.**, JENSEN, W., (2010) "Control of a 2-DOF prosthetic hand using intramuscular emg", *ISEK2010*, Aalborg, Denmark. (submitted 12.09)
- A57[†] GENG, B., **YOSHIDA, K.**, JENSEN, W., (2009) "Effects of stimulus patterns on sensory thresholds in dual-channel electrocutaneous stimulation", *Soc. Neuroscience Abstr.*, Chicago, IL
- C56 BORETIUS, T., BADIA, J., PASCUAL-FONT A., ANDREU, D., AZEVEDO-COSTE, C., DIVOUX, J-L., STIEGLITZ, T., NAVARRO, X., **YOSHIDA, K.**, (2009) "Transversal intrafascicular multichannel electrode (TIME) a interface to peripheral nerves: preliminary in-vivo results in rats", *IFESS2009*, Seoul, Korea, submitted, 7.09
- C55[†] JAYARAM, S., JENSEN, W., **YOSHIDA, K.**, (2009) "Viscoelastic implantation mechanics of needle electrodes into rat cerebral cortex", *IFESS2009*, Seoul Korea, submitted, 7.09.
- C54[†] TORKAMANI-AZAR, M., KAMAVUAKO, E.N., SALAMA, P., **YOSHIDA, K.**, (2008) "Multi-scale and higher order statistical analyses of intrafascicular nerve recordings" *IFESS2008*, Freiburg, Germany.
- C53[†] KURSTJENS, M., JENSEN, W., **YOSHIDA, K.**, (2008) "Selective activation of pig forearm muscles using thin-film intrafascicular electrodes implanted in the median nerve" *IFESS2008*, Freiburg, Germany.
- C52[†] DJILAS, M., AZEVEDO-COSTE, C., GUIRAUD, D., BOURIEN, J., **YOSHIDA, K.**, (2008) "Wavelet-based spike sorting of muscle spindle afferent nerve activity recorded with thin-film intrafascicular electrodes", *IFESS2008*, Freiburg, Germany.
- C51 FARINA, D., KAMMER, S., **YOSHIDA, K.**, (2008) "Design of thin-film electrodes for multi-channel intramuscular recordings", *ISEK2008*.
- C50[†] DIGIOVANNA, J., CITI, L., **YOSHIDA, K.**, CARPANETO, J., PRINCIPE, J.C., SANCHEZ, J.C., MICERA, S., (2008) "Inferring the stability of LIFE through Brain Machine Interfaces", *IEEE-EMBC*.
- C49[†] PENNISI, C.P.A., ZACHAR, V., **YOSHIDA, K.**, (2007) "Electrophysiological characterization of human mesenchymal stem cells derived from adipose tissue", *EMBO EuroStemCell*.
- C48[†] PENNISI, C.P., SEVCENCU, C., DOLATSHAHI-PIROUZ, A., FOSS, M., LARSEN, A.N., HANSEN, J.L., ZACHER, V., BESENBACHER, F., **YOSHIDA, K.**, (2008) "Influence of Nano-Topography of Platinum Surfaces on Fibroblast Adhesion and Morphology", *Biomaterials*.
- C47 **YOSHIDA, K.**, KURSTJENS, M., JENSEN, W. (2007) "Thin Film Longitudinal Intra-Fascicular Electrodes (tfLIFE): a multichannel peripheral nerve neural interface", *BMES2007*.
- C46[†] TOSATO M., **YOSHIDA K.**, TOFT E., STRUIJK J. (2007) "Procedure for real-time optimization of cardiac control through Vagal Nerve Stimulation", Vienna FES Workshop, in *Artificial Organs*, 31(8), pp.A13-A14, 29.
- C45[†] SEVCENCU, C., DOLATSHAHI-PIROUZ, A., FOSS, M., LARSEN, A.N., HANSEN, J.H., ZACHAR, V., BESENBACHER, F., **YOSHIDA, K.**, (2007) "The effect of modification of the nano-topography of implantable surfaces on the proliferation of fibroblasts", *Vienna FES Workshop*.
- C44 **YOSHIDA, K.**, KURSTJENS, M., CITI, L., KOCH, K.P., MICERA, S., (2007) "Recording experience with the thin-film Longitudinal Intra-Fascicular Electrode, a multichannel peripheral nerve interface", *ICORR2007*
- C43 NAVARRO, X., LAGO, N., VIVÓ, M., **YOSHIDA, K.**, KOCH, K.P., POPPENDIECK, W., MICERA, S., (2007) "Neurobiological evaluation of thin-film longitudinal intrafascicular electrodes as a peripheral nerve interface", *ICORR2007*
- C42[†] DJILAS, M., **YOSHIDA, K.**, KURSTJENS, M., AZEVEDO-COSTE, C., (2007) "Improving the signal-to-noise ratio in recordings with thin-film longitudinal intra-fascicular electrodes using shielding cuffs", *IEEE-NER2007*, Hawaii
- C41 MICERA, S., SERGI, P.N., CARPANETO, J., CITI, L., BOSSI, S., KOCH, K.P., HOFFMANN, K.P., MENCIASSI, A., **YOSHIDA, K.**, DARIO, P., (2006) "Experiments on the development and use of a new generation of intra-neural electrodes to control robotic devices", Conf Proc, IEEE EMBS 2006:2940-3. DOI: 10.1109/IEMBS.2006.260346. PubMed PMID: 17945747.
- C40[†] DJILAS, M., AZEVEDO, C., **YOSHIDA, K.**, CATHÉBRAS, G., (2006) "Interpretation of ENG signal for FES closed-loop control", *11th- Ann. Int. Conf of the Int.Functional Electrical Stimulation Society (IFESS)*, Zao, Japan.
- C39 MARTÍNEZ-GÓMEZ, J., **YOSHIDA, K.**, KAMMER, S., KOCH, K.P., HOFFMANN, K.P., (2006) "Theoretical Modelling of Microprobe Tips for Insertion into Peripheral Nerves", *11th Ann. Int. Conf of the Int.Functional Electrical Stimulation Society (IFESS)*, Zao, Japan.
- C38[†] PENNISI, C.P., GREENBAUM, E., **YOSHIDA, K.**, (2006) "Electrostatics of Photosynthetic Reaction Centers in Membranes", *28th Ann. Int. Conf. of the IEEE-EMBS*, New York City, NY, USA, pp. 4209-4212.

- C37 YOSHIDA, K., HENNINGS, K., KAMMER, S., (2006), "Acute performance of the thin-film longitudinal intra-fascicular electrode", *BioRob 2006*, Pisa, Italy.
- C36[†] CITI, L., MICERA, S., CARPANETO, J., YOSHIDA, K., HOFFMANN, K.P., KOCH, K.P., DARIO, P., (2006), "Characterization of tLIFE neural response for the control of a cybernetic hand", *BioRob 2006*, Pisa, Italy.
- C35[†] PENNISI, C.P.A., CHEMINEAU, E., GREENBAUM, E., YOSHIDA, K., (2005), "Finite element model to predict the electric potential distribution in PS I-containing vesicles", *World Biophysics Congress*, Montpellier, France.
- C34[†] AZEVEDO, C., YOSHIDA, K., (2005) "Towards a model-based estimator of muscle length and force using muscle afferent signals for real time fes control", *Eurocon 2005*, Belgrade, Serbia-Montenegro.
- C33[†] TOSATO, M., YOSHIDA, K., TOFT, E., STRUIJK, J.J., (2005) "Characterization of the cardiac response to Vagal Nerve Stimulation", *IEEE Conf. Neuroeng.*, Washington DC, USA.
- A32 JOVANOVIĆ, K., YOSHIDA, K., STEIN, R.B., BURKE, R.E., (2004) "Localizing The Rhythmogenic Network For Bipedal Locomotion In Necturus Brachial Spinal Cord", *Soc. Neuroscience Abst.*, New Orleans, LA.
- C31[†] YOSHIDA, K., TOSATO, M., B KJÆRGAARD, B., (2004) "Efficacy of Surface Electrodes for Detection of ECG during Deep Accidental Hypothermia", *Computers in Cardiology 2004*, Chicago, IL, USA
- C30[†] CHIMINEAU, E.T., SCHNABEL, V., YOSHIDA, K., (2004) "A Modeling Study of the Recording Selectivity of Longitudinal Intrafascicular Electrodes", *9th Ann. Int. Conf of the Int. Functional Electrical Stimulation Society (IFESS)*, Bournemouth, UK.
- C29[†] TOSATO, M., TOFT, E., YOSHIDA, K., STRUIJK, J.J., (2004) "Heart Rate Control through Vagal Nerve Stimulation", *9th Ann. Int. Conf of the Int. Functional Electrical Stimulation Society (IFESS)*, Bournemouth, UK.
- A28 YOSHIDA, K., JENSEN, W., (2004) "LIFE: a penetrating interface to the peripheral nerve", *Ann. Conf of the Canadian Physiological Society*, BC, Canada.
- C27[†] JENSEN, W., HOFMANN, U.G., YOSHIDA, K., (2003) "Assessment of subdural insertion force of single-tine microelectrodes in rat cerebral cortex", *25th Ann. Int. Conf. of the IEEE-EMBS*, Cancun, Mexico, pp. 2168-2171.
- C26 HOFMANN, U.G., JENSEN, W., YOSHIDA, K., KINDLUNDH, M., NORLIN, P. (2002) "Silizium Vielfach-Mikrosonden für die Neurowissenschaften", *Focus Mul*, 19(3), pp.132-139.
- C25[†] JENSEN W, YOSHIDA K. (2002) "Long-Term Recording Properties of Longitudinal Intra-Fascicular Electrodes", *7th Ann. Int. Conf. of the Int Functional Electrical Stimulation Society (IFESS)*, Ljubljana, Slovenia.
- C24[†] JENSEN, W., YOSHIDA, K., MALINA, T., HOFMANN, U.G., (2001) "Measurement of intrafascicular insertion force of a tungsten needle into peripheral nerve", *23rd Ann. Int Conf. of the IEEE-EMBS*, Istanbul, Turkey.
- C23[†] PATRICIU, A., YOSHIDA, K., DEMONTE, T.P., JOY, M.L.G., (2001) "Detecting skin burns induced by surface electrodes", *23rd Ann. Int Conf. of the IEEE-EMBS*, Istanbul, Turkey.
- A22[†] JENSEN, W., YOSHIDA, K., (2001) "The rabbit model and LIFE as a neural interface", *ScandLAS 2001*, Aarhus, Denmark.
- A21 NORLIN, P., KINDLUNDH, M., MOUROUX, A., YOSHIDA, K., JENSEN, W., HOFMANN, U.G., (2001) "A 32-site neural recording probe fabricated by double-sided deep reactive ion etching of Silicon-on_Insulator substrates", *Proc. 12th Micromechanics Europe Workshop*, Cork, Ireland.
- C20 YOSHIDA, K., JENSEN, W., NORLIN, P., KINDLUNDH, M., HOFMANN, U.G., (2001) "Characterization of silicon microelectrodes from the EU-VSAMUEL project", *Proc. 35. Jahrestagung der Deutschen Gesellschaft für Biomedizinische Technik e.V. (DGBMT)*, Schiele & Schön GmbH, Bochum, Germany.
- C19 PELLINEN, D., ROUSCHE, P., YOSHIDA, K., PIVIN, D., KIPKE, D., (2000) "Manufacturing techniques for a planar 'flexible' chronic neural interface", *Proc. World Congress on Medical Physics and Biomedical Engineering*, Chicago, IL.
- C18 HOFMANN, U.G., DE SCHUTTER, E., YOSHIDA, K., DE CURTIS, M., NORLIN, P., (2000) "On the design of multi-site microelectrodes for neuronal recordings", *Proc. Micro.tech 2000*.
- C17 YOSHIDA, K., PATRICIU, A., (2000) "Changes in the skin and electrode impedance spectra due to long-term surface stimulation", *IFESS Ann. Meeting Abst.*, Aalborg, Denmark.
- C16 YOSHIDA, K., PELLINEN, D., PIVIN, D., ROUSCHE, P.J., KIPKE, D., (2000) "Development of the thin-film longitudinal intra-fascicular electrode", *IFESS Ann. Meeting Abst.*, Aalborg, Denmark.
- C15 YOSHIDA, K., INMANN, A., HAUGLAND, M.K., (1999) "Measurement of complex impedance spectra of implanted electrodes", *IFESS Ann. Meeting Abst*, Sendai, Japan (poster).

- A14 **YOSHIDA, K.**, JOVANOVIĆ, K., STEIN, R.B., (1998) "Developments in longitudinal intra-fascicular electrodes for peripheral nerve recording and stimulation", *Soc. Neuroscience Abst.* New Orleans, LA (poster).
- C13 **YOSHIDA, K.**, JOVANOVIĆ, K., STEIN, R.B.,(1997) "Chronic Neural Recordings Using Longitudinal Intra-Fascicular Electrodes", *IFESS Ann. Meeting Abst.* Vancouver, BC.
- C12 HOFFER, J.A., STRANGE, K.D., CHRISTENSEN, P.R., CHEN, Y., **YOSHIDA, K.**, (1997) "Multichannel recordings from peripheral nerves: 1. Properties of multi-contact cuff (MCC) and longitudinal intra-fascicular electrode (LIFE) arrays implanted in cat forelimb nerves", *IFESS Ann. Meeting Abst.*, Vancouver, BC.
- C11 STRANGE, K.D., CHRISTENSEN, P.R., CHEN, Y., **YOSHIDA, K.**, HOFFER, J.A., (1997) "Multichannel recordings from peripheral nerves: 3. Source identification with electrical stimulation of digits", *IFESS Ann. Meeting Abst.*, Vancouver, BC.
- A10 **YOSHIDA, K.**, JOVANOVIĆ, K., YANG, J., STEIN, R.B.,(1997) "Longitudinal Intra-Fascicular Electrodes for Peripheral Nerve Recording and Stimulation", *Soc. Neuroscience Abst.*, New Orleans, LA.
- A9 JOVANOVIĆ, K., **YOSHIDA, K.**, CHEN, J., STEIN, R.B., (1997) "Localization of rhythmogenic network controlling bipedal locomotion in mudpuppy (*Necturus maculatus*)", *Soc. Neuroscience Abst.*, New Orleans, LA.
- A8 CHENG, J., STEIN, R.B., JOVANOVIĆ, K., **YOSHIDA, K.**,(1997) "Localization, activation and modulation of networks for walking in mudpuppy spinal cord", *Soc. Neuroscience Abst.*, New Orleans, LA.
- C7. **YOSHIDA, K.**, STEIN, R.B.,(1996) "Development of Chronic Longitudinal Intrafascicular Electrodes", *Proc. 18th Ann. Int. Conf. of the IEEE-EMBS*, Amsterdam, Netherlands, pp. 670-671.
- A6 **YOSHIDA, K.**, HORCH, K.W.,(1995) "Artificial control of ankle position using muscle afferent feedback", *Neuroscience Network Ann. Meeting Abst.*, Ottawa, ON.
- C5 **YOSHIDA, K.**, HORCH, K.W.,(1994) "FNS control of ankle position using neural feedback", 4th Int. Neural Prostheses Conference: Motor Control., Mt. Sterling, OH. July 23-28.
- A4 **YOSHIDA, K.**, HORCH, K.W.,(1993) "Using neural feedback for closed-loop control of cat hindlimb", 24th Ann. Neural Prosthesis Workshop, Bethesda, MD, Oct 13-15; 1st Ann. Intermountain Neuroscience Chapter Meeting, Salt Lake City, UT, Oct 25 (poster).
- C3 **YOSHIDA, K.**, HORCH, K.W.,(1992) "Reduction in the fatigue of electrically stimulated muscle using dual channel stimulation with intrafascicular electrodes", *Proc. 14th Ann. Int. Conf. of the IEEE-EMBS*, Paris, France, Oct 28-Nov 1, pp.1392-1393 (platform).
- C2 **YOSHIDA, K.**, HORCH, K.W.,(1991) "Multi-channel intrafascicular nerve stimulation", *3rd Int. Neural Prostheses Conf.: Motor Control.*, Banff Aug 10-15. Sponsored by the Engineering Foundation and the World Neuroscience Congress (poster).
- C1 **YOSHIDA, K.**, HORCH, K.W.,(1990) "Multi-channel nerve stimulation using intrafascicular electrodes", *Proc. 12th Ann. Int. Conf. of the IEEE-EMBS, Philadelphia, PA, Nov 1-4, pp.2187-2188* (poster).

PATENTS:

Issued Patent

- P2 **YOSHIDA, K.**, MAUSER, K., STAVNSHOJ, J., "Digitally invertible universal amplifier for recording and processing bioelectric signals", US Patent #9,622,672B2, Issued 18.4.2017
- P1 **YOSHIDA, K.**, QIAO S., HIMEBAUGH, B., SOLIMAN, M. "Extended Analog Computer Apparatus" US Patent #9,594,930, Issued 14.3.2017

Patent Applications

- PA6 **YOSHIDA, K.**, HORN, M.R., ALHAWWASH, A., LAZORCHAK, N., VETTER, C.P., DOERING, O.M., "Peripheral nerve activation and blocking using cuff assembly and sinusoidal low frequency alternating current", International Patent Application PCT/US22/43612, 9/15/2022.
- PA5 BASHIRULLAH, R., CARR, M., **YOSHIDA, K.**, "Implantable neurostimulation system", International Patent Application PCT/IB2019/060772, 12/13/2019
- PA4 **YOSHIDA, K.**, HORN, MR., "Methods and systems for blocking nerve activity propagation in nerve fibers", International Patent Application PCT/US2018/028403, 4/19/2018
- PA3 HIMEBAUGH, B.D., MATTES, G.W., **YOSHIDA, K.**, "Sensor signal processing systems and methods featuring an analog neural network", US Patent Application No. US 2016-0120428, 5/5/2016
- PA2 **YOSHIDA, K.**, MAUSER, K., STAVNSHØJ, J., "Digitally invertible universal amplifier for recording and processing of bioelectric signals", International Patent Application No. PCT/US 61/832,469, 6/27/2014

PA1 **YOSHIDA, K.**, QIAO S., HIMEBAUGH, B., SOLIMAN, M. "Extended Analog Computer Apparatus"
International Patent Application No PCT/US2013/029133, Filed 05.03.2013, Pub. No.
WO/2013/134270, Pub Date 12.09.2013

Provisional Patent Applications

PP8 **YOSHIDA, K.**, DOERING, O., VETTER, C.P., "ELECTRODE CUFF", US Provisional Application Serial No.
63/247,106, Filed 22 Sept 2021.

PP7 **YOSHIDA, K.**, HORN, M.R., ALHAWWASH, A., LAZORCHAK, N., "In-vivo peripheral nerves activation using
sinusoidal low frequency alternating currents", US Provisional Application Serial No. 63/244,278, Filed
15 Sept 2021.

PP6 **YOSHIDA, K.**, HORN, M.R., "Methods and systems for blocking nerve activity propagation in nerve
fibers", US Provisional Patent Application No. 62/487,264, Filed 19 Apr 2017

PP5 HIMEBAUGH, B.D., MATTES, G.W., **YOSHIDA, K.**, "Sensor signal processing systems and methods
featuring an analog neural network", US Provisional Patent Application 0745.02PR2, 24 July 2015

PP4 **YOSHIDA, K.**, MAUSER, K., STAVNSHØJ, J., "Invertible universal biosignals amplifier", US Provisional
Patent Application US 61/832,469, Filed 20 May 2013

PP3 **YOSHIDA, K.**, QIAO S., HIMEBAUGH, B., SOLIMAN, M., "Extended Analog Computer Apparatus", US
Provisional Patent Application No. 61/680,077, Filed 6 Aug 2012.

PP2 **YOSHIDA, K.**, QIAO S., HIMEBAUGH, B., "Extended Analog Computer Apparatus", US Provisional Patent
Application No. 61/606,741, Filed 5 Mar 2012.

PP1 **YOSHIDA, K.**, QIAO, S., "Method for identification of nerve fiber distance and conduction velocity", US
Provisional Patent Application No. 61/579,446, Filed 22 Dec 2011.

Invention Disclosures

ID13 **YOSHIDA, K.**, ALHAWWASH, A., HORN, M.R., "Low Frequency Alternating Current nerve activation",
ICO#2022-10, Filed 15 July 2021.

ID12 **YOSHIDA, K.**, VETTER, C.P., "Novel high performance carbon + PEDOT:PSS electrode contact for
bioelectric interfaces", ICO#2021-134, Filed 24 May 2021

ID11 **YOSHIDA, K.**, DOERING, O., "Closure for 3D printed cuff electrodes", ICO#2021-133, Filed 24 May 2021

ID10 **YOSHIDA, K.**, HORN, M.R., "Low Frequency Alternating Current (LFAC) nerve block", IU 2017-133-02,
Filed 13 Mar 2017

ID9 LONTIS, E.R., JENSEN, W., **YOSHIDA, K.**, "Variable geometry pads and technique for sensory input on
peripheral nerve trunks", Filed 3 May 2016

ID8 HIMEBAUGH, B.D., MATTES, G.W., **YOSHIDA, K.**, BERTRAM, M.J., "System for Continuous Low-Power
Sensor Event Detection", Filed 8 May 2015

ID7 **YOSHIDA, K.**, SOLIMAN, M.M., QIAO, S., HIMEBAUGH, B., MILLS, J.W., "Implementation of arbitrary filters
using analog voltage manifolds", Filed 23 Jan 2012

ID6 **YOSHIDA, K.**, MAUSER, K., STAVNSHØJ, J., "Invertible universal biosignals amplifier", Filed 23 Aug 2011

ID5 **YOSHIDA, K.**, SEMPROTT, D., "Calibration and compensation for lead wire parasitic capacitance using
the rapid bioelectrode impedance spectrum characterization technique", Filed 23 Aug 2011

ID4 **YOSHIDA, K.**, SEMPROTT, D., "Rapid bioelectrode and tissue impedance spectrum characterization",
Filed 23 Aug 2011

ID3 **YOSHIDA, K.**, QIAO, S., "Method for identification of nerve fiber distance and conduction velocity", Filed
23 Aug 2011

ID2 **YOSHIDA, K.**, "Thin-film intraneural electrode", Filed 30 May 2007.

ID1 **YOSHIDA, K.**, DJILAS, M., "Nerve cuff for shielding intraneural electrode signals from extraneural noise
sources", Filed 30 May 2007

TEACHING:

INDIANA UNIVERSITY - PURDUE UNIVERSITY INDIANAPOLIS - BIOMEDICAL ENGINEERING

BME41100 - Quantitative Physiology, 3CR (Core BME Course)

Introduction to systems physiology and classical control systems for biomedical engineers

Format: Lecture Role: Course Organizer, Lecturer

Term (Enrollment): F2007 (12), F2008 (15), F2009 (15), F2010 (28), F2011 (17), F2012 (30), F2013 (27), F2014 (31), F2015 (20), F2016 (22), F2017 (32), F2018 (32), F2019 (31), F2020 (40)

BME41101 - Quantitative Physiology in BME, 4CR (Core BME Course)

BME41100 expanded with a practical exercises section

Format: Lecture Role: Course Organizer, Lecturer

Term (Enrollment): F2021 (38)

BME24100 - Fundamentals of Biomechanics, 4CR (Core BME Course)

Introduction to engineering mechanics (statics), and solid mechanics for biomedical engineers

Format: Lecture, Practicum Role: Course Organizer, Lecturer

Term (Enrollment): Sp2009 (27)

BME59500 - Biomedical Instrumentation, 3 CR (Elective Course)

Analog electronics and sensors applied to biomedical applications

Format: Lecture/Lab Role: Course Organizer, Lecturer

Term (Enrollment): Sp2008 (12), Sp2010 (7)

BME59500 - Neural Engineering, 3 CR (Elective Graduate Course)

Bioelectric phenomenon, and extracellular techniques and applications interacting with the phenomenon.

Format: Lecture/Lab Role: Course Organizer, Lecturer

Term (Enrollment): Sp2009 (5), Sp2011 (10), Sp2013 (7), Sp2015 (5), Sp2017 (13), Sp2019 (12), Sp2021 (14)

BME59500 - Embedded Bioinstrumentation, 3 CR (Elective Graduate Course)

Microcontrollers applied to embedded biomedical instrumentation

Format: Lecture/Lab Role: Course Organizer, Lecturer

Term (Enrollment): Sp2012 (2), Sp2014 (7), Sp2016 (8), Sp2018 (9), Sp2020 (8), Sp2022 (5)

BME697 - Directed Reading, 3 CR (Elective Graduate Course)

Non-thesis graduate level independent study

Format: Lecture Role: Course Organizer, Advisor

Term: F2014

BME696 - Directed Project, 3 CR (Elective Graduate Course)

Non-thesis graduate level independent study

Format: Lab Role: Course Organizer, Advisor

Term: Su2015, F2021(1)

INDIANA UNIVERSITY SCHOOL OF MEDICINE – BIOMEDICAL SCIENCES

GRDM G727 - Animal Models of Human Diseases, 1 CR (Elective Graduate Course)

Format: Lecture Role: Lecturer

Term: Sp2021(20), Sp2022(18)

HERRON SCHOOL OF ART AND DESIGN

Medical Imaging and Art

Application of medical ultrasound as a media for art

Format: Lab Role: Co organizer

Term: Fa2021(28)

PURDUE UNIVERSITY - WELDON SCHOOL OF BIOMEDICAL ENGINEERING
BME697a - CLA - Neural Prosthetics and Biocompatibility, 1 CR (Elective PhD Course)
PhD level topical critical literature analysis
Format: Lecture Role: Course Organizer, Lecturer
Term: Sp2008

AALBORG UNIVERSITY - SUNHEDSTEKNOLOGI (BIOMEDICAL ENGINEERING)
ST3 - Medikoteknisk Instrumentering (Bioinstrumentation), 3 ECTS (Core ST Course)
Analog electronics and circuit analysis for undergraduate (3rd semester) biomedical engineering students
Format: Lecture / Exercise Role: Course Organizer, Lecturer
Term: F2001, F2002, F2003, F2004, F2005

ST3 - Medikoteknisk Måleteknik (Medical measurements), 1 ECTS (Core ST Course)
Analog electronics and circuit analysis lab undergraduate (3rd semester) biomedical engineering students
Format: Lecture / Exercise Role: Course Organizer, Lecturer
Term: F2001, F2002, F2003, F2004, F2005

ST4 - System Arkitektur & Integration (Computer sys arch & intigration), 3 ECTS (Core ST Course)
Computer architecture and microcontroller programming course for undergraduate (4th semester) biomedical engineering students
Format: Lecture / Exercise Role: Course Organizer, Lecturer
Term: Sp2002, Sp2003, Sp2004, Sp2006

ST6 - Anvendt Fysik (Applied Physics: Biomechanics), 3 ECTS (Core ST Course)
Biomechanics (statics, dynamics and solid mechanics) for undergraduate (6th semester) biomedical engineering students
Format: Lecture / Exercise Role: Course Organizer, Lecturer
Term: Sp2003, Sp2004, Sp2006

AALBORG UNIVERSITY - EUROPEAN DOCTORAL SCHOOL
Neuroprosthetics Seminar Series
PhD level topical seminar series
Format: Lecture Role: Course Organizer, Co-Lecturer
Term: Sp2004, Sp2005, Sp2006

General Laboratory Techniques in Muscle and Nerve Histology
PhD level course on histological methods for muscle and nerve tissues
Format: Lecture / Lab Role: Course Organizer, Co-Lecturer
Term: Sp2003

Basic Experimental Data Acquisition and Processing
PhD level course on sampling and digital signal processing for non-engineers
Format: Lecture Role: Course Organizer, Lecturer
Term: F1999

Bioelectrodes for Neuro/Myoelectric Interfaces
PhD level course on bioelectric interfaces
Format: Lecture Role: Course Organizer, Lecturer
Term: Sp1999, Sp2001

MENTORING:

11 Senior Design Team Projects Hosted

41 Undergraduate Research Practica Hosted (29 Domestic, 12 Foreign)

9 Graduate Research Practica Hosted (9 Foreign)

37 Graduate Students (25 MS (18 Thesis Advisor), 12 PHD (8 Thesis Advisor))

GRADUATE STUDENTS					
Individual	Role	Inclusive Dates	Degree	Status	Program
Nathaniel Lazorchak	Thesis Advisor	6.2022 - pres	MS	1	IUPUI-BME
Yutika Badhe	Committee	11.2021 - pres	PhD	1	UT Dallas
Bo Sun	Thesis Advisor	1.2021 – 8.2022	MS	3	IUPUI-BME
Michael Ryne Horn	Thesis Advisor	1.2021 – pres	PhD	1	IUPUI-BME
Awadh Al Hawwash	Thesis Advisor	8.2020 – pres	PhD	1	Purdue BME
Christopher Hoffmann	Advisor	5.2020 – 5.2021	BSMS	2	IUPUI-BME
Onna Doering	Thesis Advisor	8.2020 – 5.2022	MS	2	IUPUI-BME
Awadh Al Hawwash	Thesis Advisor	5.2019 – 8.2020	MS	2	IUPUI-BME
Christian Vetter	Thesis Advisor	1.2019 – 8.2020	MS	2	IUPUI-BME
David Bustamante	Committee	1.2018 – 5.2020	MS	2	IUPUI-BME
Devyani Kulkarni	Advisor	8.2018 – 5.2019	MS	2	IUPUI-BME
Ivette Muzquiz van Dyke	Thesis Advisor	5.2018 – 8.2020	BSMS	2	IUPUI-BME
Shozaf Zaidi	Advisor	5.2018 – 5.2019	BSMS	2	IUPUI-BME
Lindsay Richardson Zehrung	Thesis Advisor	1.2018 – 1.2020	MS	3	IUPUI-BME
Landan Mintch	Committee	1.2018 – 5.2019	MS	2	IUPUI-BME
Namrata Tamghare	Advisor	3.2017 – 5.2018	MS	2	IUPUI-BME
Chandrama Ahmed	Thesis Advisor	8.2015 – 12.2017	MS	2	IUPUI-BME
Caleb Comoglio	Thesis Advisor	5.2015 – 5.2017	MS	2	IUPUI-BME
Hunter Cox	Thesis Advisor	5.2015 – 8.2017	MS	2	IUPUI-BME
Michael Bertram	Thesis Advisor	3.2015 – 12.2017	MS	2	IUPUI-BME
Daniel Fisher	Advisor	1.2015 – 12.2016	MS	2	IUPUI-BME
Michael Ryne Horn	Thesis Advisor	5.2013 – 12.2016	MS	2	IUPUI-BME
Nan Ying	Thesis Advisor	9.2012 – 11.2012	MS	3	IUPUI-BME
Muller Soliman	Thesis Advisor	5.2011 – 7.2012	MS	2	IUPUI BME
David Sempsrott	Thesis Advisor	8.2009 – 11.2012	MS	2	IUPUI BME
Kevin Mauser	Thesis Advisor	8.2009 – 11.2012	MS	2	IUPUI BME
Shaoyu Qiao	Thesis Advisor	8.2009 – 5.2014	PhD	2	Purdue BME
Aritra Kundu	Committee, Advisor	2.2009 – 5.2013	PhD	2	Aalborg Univ
Smitha Murthy Jayaram	Advisor	9.2008 – 5.2009	MS	2	IUPUI BME
Bo Geng	Co-thesis Advisor	7.2008 – 7.2013	PhD	2	Aalborg Univ
Shaoyu Qiao	Thesis Advisor	6.2008 – 7.2009	MS	2	IUPUI BME
Seth Wilks	Committee	2008 – 7.2011	PhD	2	Purdue BME
Mastaneh Torkamani Azar	Co-thesis Advisor	4.2007 – 8.2009	MS	3	IUPUI ECE
Ernest Nlandu Kamavuako	Co-thesis Advisor	2.2007 – 6.2010	PhD	2	Aalborg Univ
Milan Djilas	Committee, Advisor	6.2006 – 10.2008	PhD	2	U Montpellier2
Cristian Pablo Pennisi	Thesis Advisor	2.2004 – 9.2008	PhD	2	Aalborg Univ
Marco Tosato	Committee, Advisor	5.2003 – 6.2007	PhD	2	Aalborg Univ
Eric Chemineau	Thesis Advisor	8.2002 – 2007	PhD	3	Aalborg Univ
Andrei Patriciu	Co-thesis Advisor	6.2000 – 2005	PhD	3	Aalborg Univ

Status = (1 In progress, 2 Completed, 3 Did not complete)

THESIS/DISSERTATION EXAMINATION COMMITTEES				
Individual	Role	Inclusive Dates	Degree	Institution
Parisa Sabetian	External	3.2020	PhD	Univ Toronto
Stephanie Iwasa	External	4.2019	PhD	Univ Toronto

POST-DOCTORAL FELLOWS			
Individual	Role	Inclusive Dates	Institution
Ashley Larson	Advisor	3.2021	Marion Univ-DO
Jing Xiong	Advisor	2.2010 – 8.2010	IUPUI BME
Mathijs Kurstjens	Advisor	1.2005 – 10.2006	Aalborg Univ
Kristian Hennings	Advisor	6.2004 – 12.2004	Aalborg Univ
Christine Azevedo Coste	Advisor	11.2003 – 9.2004	Aalborg Univ
Winnie Jensen	Co Advisor	6.2000 – 1.2003	Aalborg Univ Univ Illinois Chicago

FACULTY			
Individual	Role	Inclusive Dates	Institution
Justin Huber	Co-Mentor	4.2021 - Present	Univ Kentucky-MD

GRADUATE RESEARCH PRACTICA HOSTED			
Individual	Inclusive Dates	Home Institution	Host Institution
Abigail Beard	5.2022 - 8.2022	IUSM Bloomington (IMPRS)	IUPUI BME

UNDERGRADUATE RESEARCH PRACTICA HOSTED			
Individual	Inclusive Dates	Home Institution	Host Institution
Karan Bhula	10.2022 - pres	IUPUI-BME (NEIL)	IUPUI BME
Kila Johnson	5.2022 - 8.2022	U Indy (NSF REU)	IUPUI BME
Austyne Taylor	1.2022 - 3.2022	IUPUI BME - Butler Univ	IUPUI BME
Scott Miller	12.2021 - 5.2022	IUPUI BME	IUPUI BME
Tyler Fears	9.2021 - 6.2022	IUPUI BME (UROP)	IUPUI BME
James Lopes	6.2021 - 8.2021	IUPUI BME	IUPUI BME
Alexandria Dillon	6.2021 - 8.2021	Clark Atlanta Univ (NSF REU)	IUPUI-BME
Wushuang Yang	4.2020 - 5.2021	IUPUI BME	IUPUI BME
Travis Kening	4.2020 - 1.2021	IUPUI BME	IUPUI BME
Elijah Racz	2.2020 – 10.2020	IUPUI BME	IUPUI BME
Tyler Johnson	10.2019 - pres	IUPUI BME	IUPUI BME
Tyler Fears	8.2019 – 8.2021	IUPUI BME	IUPUI BME
Gideon Scott-Miller	8.2019 – 1.2020	IUPUI Biology	IUPUI BME
Justin-Thuy Parks	1.2020 – pres	IUPUI BME	IUPUI BME
Bryant Bernard	9.2019 – 1.2020	IUPUI ECE	IUPUI BME
Christopher Hoffman	5.2019 – 5.2020	IUPUI BME	IUPUI BME
Nathanial Lazorchak	5.2019 – pres	IUPUI BME	IUPUI BME
Grant Gaebler	1.2019 – 5.2020	IUPUI BME	IUPUI BME
John Ragsdell	1.2019 – 5.2020	IUPUI BME	IUPUI BME
William Mcannally	10.2018 – 5.2019	IUPUI Neuroscience	IUPUI BME
Carolina Whitaker	5.2018 – 8.2018	CWRU, Summer Volunteer	IUPUI BME
Macallister Smolik	5.2018 – 1.2020	IUPUI Biology	IUPUI BME
Elizabeth Dow	5.2017 – 8.2017	PUWL, Summer Volunteer	IUPUI-BME
Lindsay Richardson	5.2017 – 12.2017	IUPUI BME	IUPUI BME
Steven Stone	7.2015 – 9.2015	IUPUI BME	IUPUI BME
Joseph Yeo	5.2014 – 8.2014	IUPUI BME	IUPUI BME
Tanja Green	5.2013 – 8.2013	IUPUI BME	IUPUI BME
Daniel Sisson	5.2013 – 8.2013	IUPUI BME	IUPUI BME
Elizabeth McIntyre	10.2012 - 1.2013	IUPUI BME	IUPUI BME
Aimee Kathman	8.2012 – 5.2013	IUPUI/Butler EDDP	IUPUI BME
Alexandre Rolland	4.2012 – 6.2012	IUT Montpellier, France	IUPUI BME
Talib Nalim	7.2010 – 8.2010	Summer Volunteer	IUPUI BME
Juliana Kim	5.2010 – 8.2010	Summer Volunteer	IUPUI BME
Mike Piontek	2.2010 – 5.2011	IUPUI BME	IUPUI BME

Seitu Joseph	2.2010 – 5.2011	IUPUI/Butler EDDP	IUPUI BME
Magali Carret	4.2008 – 6.2008	IUT Montpellier, France	IUPUI BME
Gwennaël Maffei	4.2006 – 6.2006	IUT Montpellier, France	Aalborg Univ
Sèverine Llamas	4.2006 – 6.2006	IUT Montpellier, France	Aalborg Univ
John Kudolo	2.2006 – 6.2006	Medical Univ Lübeck, Ger	Aalborg Univ
Mickaël Humbert	4.2005 – 6.2005	IUT Montpellier, France	Aalborg Univ
Geoffrey Hadjadj	4.2005 – 6.2005	IUT Montpellier, France	Aalborg Univ
Maxime Bureau	1.2005 – 6.2005	EIGSI La Rochelle, France	Aalborg Univ
Thijs Engels	2.2002 – 6.2002	Univ Twente, Netherlands	Aalborg Univ
Thomas Malina	8.2001 – 10.2001	Medical Univ Lübeck, Ger	Aalborg Univ
Felipe Otondo	6.1999 – 8.1999	Aalborg Univ	Aalborg Univ
Craig Schlagelmilch	6.1997 – 8.1997	U Alberta	U Alberta

Role = Advisor

GRADUATE RESEARCH PRACTICA HOSTED

Individual	Inclusive Dates	Home Institution	Host Institution
Aida Hejlskov Poulsen	8.2016 – 1.2017	Aalborg Univ., Denmark	IUPUI BME
Kasper Kunz Leerskov	8.2016 – 1.2017	Aalborg Univ., Denmark	IUPUI BME
Johannes Thorling Hadsund	8.2016 – 1.2017	Aalborg Univ., Denmark	IUPUI BME
Tobias Krøgholt	8.2016 – 1.2017	Aalborg Univ., Denmark	IUPUI BME
Lea Tøttrup Jørgensen	8.2016 – 1.2017	Aalborg Univ., Denmark	IUPUI BME
Andreas Werle	8.2016 – 1.2017	Hochschule Trier, Germany	IUPUI BME
Rune Monzel	8.2016 – 1.2017	Hochschule Trier, Germany	IUPUI BME
Peter Gänz	6.2014 – 11.2014	Hochschule Trier, Germany	IUPUI BME
Anatoliy Dobroshynskyy	6.2014 – 11.2014	Hochschule Trier, Germany	IUPUI BME

Role = Advisor

SENIOR DESIGN PROJECTS HOSTED

- 2021: BME Sr Design Team, Isaac Demaree, Sidnee Zeiser, Max Pugh, Zahrah Almuhaimeed
"Sensorized brace for wrist hand assessment", Co-mentor Justin Huber (U.KY).
- 2019: BME Sr Design Team, Ashley Twigg, Christopher Hoffman, Layla Al-Besher, Melody Hsieh
"MuscleCycle"
- 2018: BME Sr Design Team, Celia Ochoa, Hashim Jaber, Ajay Panuganti,
"Method to implement a multi-way strain relieved implantable bioelectric cable"
- 2017: BME Sr Design Team, Onna Doering, Mohamed Al-Jaboori, Rami Al-Rafie, Bo Sun,
"Dynamometer for measuring human performance during FES cycling"
- 2017: BME Sr Design Team, Brandon Casteel, Brad Patterson, Hunter Johnson, David Hutchings,
"Identification of a soft SLA media for 2.5D printing using a Form-1 Photostereographic Printer"
- 2016: BME Sr Design Team, Matthew Arkenberg, Kirstie Keene, Josh Arkanoff
"Modification of the Form-1 Photostereographic Printer"
- 2013: BME Sr Design Team, Michael Bertram, Sam Capouch, Eric Freeman, Jeff Marshall, Yuese Zheng
"Multichannel Functional Electrical Stimulation Control Software"
- 2012: BME Sr Design Team, Jeremiah Ayers, Tanja Green, Matthew Kiskowski, Logan Metzger
"Mechanical testing device for measuring the mechanics of vocal folds"
- 2011: BME Sr Design Team, Kevin Sempstrott, Scott Mercer, Aaron Marcket, Andrew Zeha
"Robotic assessment of leg biomechanics"
- 2010: BME Sr Design Team, Mike Piontek, James Boone, Philip Oliver, Christopher Wenzel
"Physician's dashboard", Jacob Keen (Rehabilitation Hospital of Indiana) Co-mentor.
- 2009: BME Sr Design Team, Courtney Robinson, Jonathan Landes, Nichole Leahy, Muller Soliman
"Physician's dashboard", Jacob Keen (Rehabilitation Hospital of Indiana) Co-mentor.
- 2007: BME Sr Design Team, Paul Curtis, Jack Chiang, Khalid Sergeni
"Physiological recorder", Ed Berbari Co-mentor.

STUDENT AWARDS

2021: Ivette Muzquiz, IUPUI Distinguished Master's Thesis Award (Awarded 11.2021)
2020: Onna Doering, IUPUI University Graduate Fellowship
2018: Ivette Muzquiz, IUPUI E&T CTEE research fellowship (Summer 2018, AY 2018-2019)
2018: Lindsay Richardson, IFESS Student Paper competition finalist.
2013: Shaoyu Qiao, IEEE NER Student Paper travel award pre-conference symposium.
2012: Shaoyu Qiao, Purdue University Sigma Xi Graduate Student Research Poster Award Competition.
First Place in Science and Engineering, for a the poster entitled *Method for identification of nerve fiber distance and conduction velocity through spectral analysis of extracellularly recorded action potentials*
2007: David Sempsrott, IUPUI University Graduate Fellowship
2006: Milan Djilas, IFESS Vodovnic Award (Best Student Paper), 1st Prize at IFESS 2006
2004: Eric T. Chemineau, IFESS Vodovnic Award (Best Student Paper) 2nd Prize at IFESS 2004

GRANTS/FELLOWSHIPS IN TEACHING:

IUPUI Navy Engineering Innovation & Leadership (NEIL) UROP **9/2022 - 5/2023**
Development of Inertial Measurement Units as a means to quantify the quality of human upper extremity movement

Mentee: Karan Bhula

Role: Mentor Co-Mentor: Justin Huber Status: Active **\$5,000**

IUPUI Center for Research and Learning - MURI **08/2019 – 05/2020**

Developing low-cost real-time biomedical multichannel functional electrical stimulators by fusing traditional methods with audio tools and Musical Instrument Digital Interface (MIDI) controllers.

Mentees: Grant Gaebler, Bo Sun, Emmett Husmann, Grace Collinge

Role: Co-mentor Mentor: Tim Hsu Status: Completed **\$500**

IUPUI Center for Research and Learning - UROP **05/2019 – 08/2019**

Mentees: Grant Gaebler

Role: Mentor Co-Mentor: Tim Hsu Status: Completed **\$500**

IUPUI Center for Research and Learning - UROP **05/2019 – 08/2019**

Mentees: John Ragsdell

Role: Mentor Status: Completed **\$500**

IUPUI Center for Research and Learning - MURI **09/2016 – 05/2017**

Development of a low cost non optical motion capture system for rapid clinical assessment of pathological gait

Mentees: Trang Pham, Hatem Aweied Alharthi, Alvaro Esperanca, Veronica D'Agosta

Role: Mentor Co-Mentor: Z Ben Miled Status: Completed **\$1,000**

IUPUI Center for Research and Learning - MURI **10/2014 – 05/2015**

Development of a Virtual Reality Based Psychophysical Assessment Method to Capture the Perceived Arm Position of the Amputee Phantom Limb

Mentees: Steven Albertson, James Beem, Denver Huynh, Jonathan Lau, Enlin Qian

Role: Co-Mentor Mentor: D. Baldwin Status: Completed **\$7,200**

IUPUI Center for Research and Learning - MURI **10/2013 – 04/2014**

Training the Extended Voltage Manifold Computer

Mentees: Michael Bertram, Nhan Hieu Do, Lucas Gramlin

Role: Mentor Co-Mentor: P. Salama Status: Completed **\$7,800**

IUPUI Center for Research and Learning - UROP	06/2012 – 05/2013
Measuring the kinematics and biomechanics of the leg during end point manipulation	
Mentee: Alec Willard	
Role: Mentor	Status: Completed \$1,000
 IUPUI Center for Research and Learning - UROP	 06/2012 – 05/2013
Rapid identification and separation of extracellularly recorded action potential units using the Extended Analog Computer	
Mentee: Jeremiah Ayers	
Role: Mentor	Status: Completed \$1,000
 IUPUI Center for Research and Learning – Summer MURI	 06/2012 – 08/2012
Development of a Virtual Reality Based Psychophysical Assessment Method to Capture the Perceived Arm Position of the Amputee Phantom Limb	
Mentees: Daniel French, Eric Wolf, James Corcoran, Thawnzapum Lian	
Role: Mentor Co-Mentor: P. Salama	Status: Completed \$8,000
 IUPUI Center for Research and Learning - MURI	 09/2007 – 09/2008
Towards estimating the position of the leg using sensory information intercepted by neuroprosthetic electrodes	
Mentees: Sriharsha Muttineni, David Sempsrott, Brandon Brungard	
Role: Mentor Mentor: S. O’Conner	Status: Completed \$8,000

PRESENTATIONS & EXHIBITIONS

NATIONAL EXHIBITIONS

"Creative Ultrasonics: A STEAM Pathway for Cross Disciplinary Student & Faculty Engagement in Higher Education", 27 Nov - 1 Dec 2022, Radiological Society of North America (RSNA) Annual Meeting Exhibition Showcase, McCormick Place, Chicago, IL.

LOCAL EXHIBITIONS

"Below the Surface: Recasting Reality with Ultrasound", Organizers: Petranek, S., Holland, M., Yoshida, K., Miller, S., Ambery, L., Diller, E., Payton, J., 2-27 May 2022, Cultural Arts Gallery, Campus Center, Indiana University - Purdue University Indianapolis

Announcement: <https://events.iu.edu/herron/event/563233>

Virtual exhibit: <https://my.matterport.com/show/?m=AnYw8Xo5ZJ9>

Davinci Pursuit - "Imaging Science: Inside the Magic of Ultrasound Art (Live)", Petranek, S., Yoshida, K., Sameer, I., Toms, A., Podcast hosted by Mark Kesline, Aired 1 July 2022

Podcast Link: <https://www.thedavincipursuit.com/2022/07/01/imaging-science-inside-the-magic-of-ultrasound-art-live/>

STUDENT THESES AND DISSERTATIONS (as primary advisor)

2022 Doering, O., "A comparative analysis of local and global peripheral nerve mechanical properties during cyclical tensile testing", MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis

DOI: 10.7912/C2/2935

2020 Alhawwash, A., "A novel approach to peripheral nerve activation using low frequency alternating currents", MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis

DOI: 10.7912/C2/1378

2020 Vetter, C.P., "Development towards improved durability of implanted neuroprosthetic electrodes through surface modifications", MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis

DOI: 10.7912/C2/1379

2020 Muzquiz, M.I., "Reversible nerve conduction block using low frequency alternating currents", MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis

DOI: 10.7912/C2/1377

- 2017 Ahmed, C., “Continuous characterization of universal invertible amplifier using source noise”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1360
- 2017 Comoglio, C., “Analysis of the efficacy of EPIONE therapies to treat phantom limb pain”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1356
- 2017 Cox, T.G.H., “Propagation of mechanical strain in peripheral nerve trunks and their interaction with epineural structures”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1357
- 2017 Bertram, M., “Development of the ICAANN; a low-powered, analog, neural signal processor”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1359
- 2016 Horn, M.R., “A Nerve Fiber Model and Prediction of Electrode-Fiber Coupling Simulation for Design of Peripheral Nerve Interfaces”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
ISBN: 978-0-355-59206-1
- 2014 Qiao, S., “Bioelectric nerve fiber to electrode coupling for unit identification and tracking”, PhD Dissertation, Biomedical Engineering, Purdue University
ISBN: 978-1-369-07824-4
- 2012 Soliman, M., “Developing a neural signal processor using the extended analog computer”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1334
- 2012 Sempsrott, D., “Analysis of the bioelectric impedance of the tissue-electrode interface using a novel full-spectrum approach”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1343
- 2012 Mauser, K., “A digitally invertible universal amplifier for recording and processing of bioelectric signals”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
DOI: 10.7912/C2/1342
- 2009 Qiao, S., “Modeling and Characterization of the Spatial Selectivity of Intra-fascicular Electrodes”, MS Thesis, Biomedical Engineering, Indiana University – Purdue University Indianapolis
ISBN: 978-1-369-07824-4
- 2008 Pennisi, C.P., “Optical activation of excitable cells: application of photosynthetic reaction centers” PhD Dissertation, Biomedical Engineering, International Doctoral School, Aalborg University, Denmark.
ISBN: 978-87-90562-97-7

SERVICE:

INDIANA UNIVERSITY - PURDUE UNIVERSITY INDIANAPOLIS

Campus Wide

Administrative Review Committee 8.2021 - 7.2022
Role: Member

Campus Promotion & Tenure Committee 8.2021 - 7.2022
Role: Member

Campus Sabbaticals Committee 8.2021 - 7.2022
Role: Member

School of Engineering and Technology

Unit Promotion and Tenure Board

Role: Member 8.2021 - pres
Role: Chair 8.2021 - 5.2022

Computer Resources Committee
Role: Member 2007 - pres
Role: Chair 8.2021 - pres

Graduate Education Committee
Role: Member 8.2007 - 5.2022

MSE Degree Ad-Hoc Committee
Role: Member 2.2022 - 5.2022

Strategic Plan Task force 4
Role: Member 8.2017 - 5.2019

Website Incremental Improvements Task force
Role: Member 8.2017 - 5.2019

Website Redesign Task force
Role: Member 8.2017 - 5.2019

Department of Biomedical Engineering

Graduate Committee (Combined Graduate Education, Admissions, Fellowships Committee)

Role: Member 8.2007 -9.2010
Role: Chair 8.2014 - 5.2022

Undergraduate Committee
Role: Member 8.2007 - 9.2015

Primary Committee
Role: Member 8.2014 - 5.2022

Graduate Seminar Coordinator
Role: Coordinator 8.2013 - 9.2014

Graduate Student Association
Role: Faculty Advisor 9.2015 - 5.2022

Chair Search and Screen Committee
Role: Member 5.2018 - 1.2019

Ad-Hoc Faculty Search and Screen Committee
Role: Chair 4.2019

Microsoft MSDNAA Site Administrator
Role: Administrator 2008 - 2020

Other Departments

Weldon School (Purdue University BME Dept) Graduate Admissions Committee
Role: Member 2008 - 9.2010

IUPUI Electrical and Computer Engineering Faculty Search and Screen Committee
Role: Member 9.2013 - 5.2015

Other Organizations

Indiana Clinical and Translational Sciences Institute (CTSI) DEVICE Think Tank
Role: Standing Member 1.2021 - pres

AALBORG UNIVERSITY

iNano Consortium between Aarhus and Aalborg Universities
Role: Member 2003 – 2006

Sunhedsteknologi (Biomedical Engineering) core curriculum development group
Role: Member 2002

Sunhedsteknologi (Biomedical Engineering) Medical Systems specialization development group
Role: Member 2002

Center for Nanotechnology
Role: Member 2001 – 2006

PROFESSIONAL SERVICE:

LOCAL		
Organization	Activity	Inclusive Dates
Tau Beta Pi – Indiana Zeta Chapter	Primary Advisor Founding Advisor	5.2015 – present
Tau Beta Pi – Central Indiana Alumni Chapter	Founding member	5.2017 – present
Tau Beta Zeta	Faculty Advisor Primary Advisor	8.2011 – 7.2013 8.2013 – 5.2015
Analog Computer Solutions, Inc.	Founder, Shareholder	3.2014 – 2.2016
Refer2Input, LLC	Founder, Owner	4.2014 – 6.2020
Carmel High School - InvenTeam	Consultant	1.2017 – 4.2017
Rehabilitation Hospital of Indiana - InterFACE	Strategic Planning Committee, Member	4.2017 – 2019
NATIONAL		
ZRG1 NV-C (10) Small Business: Clinical Neurophysiology, Devices, Neuroprosthetics and Biosensors	Ad-Hoc Grant Reviewer	11.2022
2022/08 ZRG1 IMST-U (70) R RFA-RM-22-002: SPARC VNS Endpoints from Standardized Parameters (VESPA) (U54)	Ad Hoc Grant Reviewer	6.2022
NIH/NINDS Study Panel ZNS1 SRB-C (04)	Ad Hoc Grant Reviewer	3.2020, 2.2021
Veterans Administration RR&D	Ad-Hoc Grant Reviewer	2.2019, 8.2013, 8.2012, 3.2011, 8.2010, 3.2010
Tau Beta Pi Association	Fellowship Reviewer	4.2016 4.2017
Luna Innovations, Inc	Consultant	5.2016 – 10.2016
Analog Computing Solutions, LLP	Consultant	3.2014 – 2.2016

INTERNATIONAL		
Organization	Activity	Inclusive Dates
University of Toronto, Faculty P&T, K.M.	External Referee	1.2021
Canada Foundation for Innovation – Wearable technologies and fibre design	Expert Committee Member (Reviewer)	6.2020
European Commission, European Young Investigators Award (EURYI)	Ad-Hoc Award Reviewer	2004
Joint Annual Conference of the Austrian, German and Swiss Societies for Biomedical Engineering	Conference Abstract / Paper Reviewer	2022
IEEE-Engineering Medicine Biology Conference	Conference Abstract / Paper Reviewer	2007, 2009 – 2014, 2018, 2019, 2021
IEEE EMBS Conference on Neural Engineering	Conference Abstract / Paper Reviewer	2011, 2013
International Functional Electrical Stimulation Society	Conference Abstract / Paper Reviewer	2010, 2017, 2018, 2019, 2021, 2022
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)	Conference Abstract / Paper Reviewer	2007
Medical Physics and Biomedical Engineering World Congress 2009	Conference Abstract / Paper Reviewer	2009
European Signal Processing Conference (EUSIPCO)	Conference Abstract / Paper Reviewer	1999
Proceedings of the IEEE	Reviewer	2016
Journal of Neural Engineering	Reviewer	2009 – 2012, 2020
IEEE Transactions Neuroscience Rehab Eng. Paladyn	Reviewer	2007 – 2013, 2015
Medical Engineering and Physics	Reviewer	2010, 2008
Brain Research	Reviewer	2009
Journal of Neuroscience Methods	Reviewer	2008
IEEE Transactions Biomedical Engineering	Reviewer	2003 – 2006, 2001
IOP Measurement Science & Tech.	Reviewer	2005
IEEE Transactions Rehabilitation Engineering	Reviewer	1996 – 2001, 2005
Encyclopedia of Biomedical Engineering	Reviewer	2004, 2005
Annals Biomedical Engineering	Reviewer	2002
Neuromodulation	Reviewer	2000
Human Movement Science	Reviewer	2000
Journal of Automatic Control	Reviewer	2002
Journal of Nanoscience and Nanotechnology	Reviewer	2003
Frontiers in Neuroscience	Reviewer	2014
Frontiers in Neuroengineering	Reviewer	2014
Journal of Physiology – Paris	Reviewer	2016
European Journal of Translational Myology	Reviewer	2017
Nature - Scientific Reports	Reviewer	2018
Frontiers in Neuroengineering	Review Editor	2009 – present
University of Toronto, Institute of Biomaterials and Biomedical Engineering – P. Sabetian	PhD Committee External Opponent	4.2020
University of Toronto, Institute of Biomaterials and Biomedical Engineering – S. Iwasa	PhD Committee External Opponent	4.2019
RehabWeek 2019 – Toronto, CA, IFESS Podium Session 2: Novel Technologies	Session Chair	26.06.2019
IFESS 2018 – Nottwil, CH, Keynote Session 1 Breathing, coughing, airway management	Session Chair	29.08.2018
IFESS 2018 – Nottwil, CH, Keynote Session 2 Pain	Session Chair	29.08.2018

IFESS 2018 – Nottwil, CH, Session 7 Implantable Systems	Session Chair	29.08.2018
RehabWeek 2017 – London, UK, Workshop – Novel technologies & natural sensory feedback for phantom limb pain modulation and therapy	Session Chair	17.07.2017
IFESS 2016 - La Grand Motte, FR, Session RS21	Session Chair	09.06.2016
31st Ann. Symp. of the Scandinavian Soc. for Laboratory Animal Science (ScandLAS), Aarhus DK, How do experiments in animal models complement experiments in human subjects? (A79)	Session Chair	15.05.2001
IFESS 2022 at RehabWeek	Scientific Program Committee	2022
IFESS 2020 (2021)	Scientific Program Committee	2019 - 2021
International Conference on Neuro Rehabilitation (ICNR)	Scientific Program Committee	2013-2014
IFESS 2014 Organizing Committee	Organizing Committee	2012
Aalborg University Faculty Search and Screen Cmte Faculty of Engineering and Science (position 42197)	External Assessor	11.2016 – 2.2017
Aalborg University Faculty Search and Screen Cmte Faculty of Engineering and Science (position 42063)	External Assessor	9.2013 – 11.2013
Aalborg University Faculty Search and Screen Cmte Faculty of Engineering and Science	External Assessor	2.2014 – 5.2014
Glaxo Smith Kline Bioelectronics – Challenge Committee	Consultant	2.2014 – 11.2014
Coloplast A/S	Consultant	2012

WEBINARS

IFESS Webinar Series: Series Initiator and Host			
Title	Speakers	Date	Role
Could electrical stimulation improve the recovery of people with Covid-19 following a prolonged ICU stay?	James Badger Gad Alon	06.10.2020	Host, Moderator
Electrical Stimulation in Neurological Disease: Clinical Objectives and Use in Practice	Ines Bersch-Porada	28.10.2020	Host
Functional Electrical Stimulation and Respiratory Function in the ICU with Covid-19 Patients	Euan McCaughey	01.12.2020	Host
A tribute for Prof Richard Stein	J. Andreas Hoffer Dejan Popovic Rick Berkelmans	18.12.2020	Host
Could Electrical Stimulation Improve the Recovery of People with Covid-19 Following a Prolonged ICU Stay?	Gad Alon James Badger	26.01.2021	Host
Mechanisms of Brain-Controlled Functional Electrical Stimulation of Muscles in Neurorehabilitation	Matija Milosevic	23.02.2021	Host
Upper Limb Functional Electrical Stimulation: Lessons Learned from Clinical Practice	Ines Bersch-Porada	02.03.2021	Host
Self managed Brain Computer Interfacing and Functional Electrical Stimulation in Clinical Practice	Aleksandra Vuckovic	11.05.2021	Host
Use it or lose it: Functional Electrical Therapy	Dejan Popovic	25.05.2021	Host
Use it or lose it: Functional Electrical Therapy	Dejan Popovic Lana Popovic Maneski Anil Aksoz	08.06.2021	Host
Special ACPIN & IFESS Joint Session on Clinical	Therese Johnston	22.06.2021	Host

Practice Guidelines:	Lisa Brown Jane Burridge Marietta van der Linden		
Should we be using transcranial direct current stimulation (tDCS) in clinical practice?	Gad Alon	06.07.2021	Host
The Clinical Practical Use of Functional Electrical Stimulation for Walking with Parkinson's Disease	Paul Taylor, Maggie Donovan-Hall	20.07.2021	Host
IFESS/ACPIN Workshop: Bridging the Gap between Functional Electrical Stimulation Research and Clinical Implementation	Cathy Bulley Adine Adonis Lisa Brown Therese Johnston	09.11.2021	Host
Spinal Stimulation vs Functional Electrical Stimulation and Neuroplasticity	Lynsey Duffell Sean Doherty	06.12.2021	Host
A Tribute to Prof Dejan Popovic	Milos Popovic	13.12.2021	Host
IFESS/SIA Joint Webinar: Update on Service Provision towards Restoring Bladder and Bowel Function using Sacral Anterior Root Stimulation	Sir Philip Craven Sean Doherty Alex Green Deepti Bhargava	08.02.2022	Host
Spinal Injuries Association and IFESS Joint Webinar			
Feasibility of FES Cycling After Acute Spinal Cord Injury	Chester Ho	22.2.22	Host
Patient Perspective: Pressure Ulcer Prevention, Wound Healing and Electrical Stimulation for People With Spinal Cord Injury	Ines Bersch John Leen Manfred Neumann	8.3.22	Host
Spinal Injuries Association and IFESS Joint Webinar			
Clinical Practice Guideline Development for Using FES To Support Walking: A Delphi Consensus Study	Cathy Bulley	22.3.22	Host
The IFESS Next Gen Initiative: Are you being served?	Andrew Ekelem	10.5.22	Host Moderator
How to Establish an FES Service - MS Society UK and IFESS UK & Ireland Chapter Webinar	Christine Singleton Alison Clarke Rob Wright	24.5.22	Host
IFESS Open Meeting at RehabWeek 2022 - Rotterdam	Simona Ferrante Tamsyn Street Jonathan Jarvis Ken Yoshida	28.7.2022	Host Speaker
Electrical Stimulation Technologies and Sexual Functioning for Men Following Spinal Cord Injury	Tamsyn Street Neil Marshall Damian Smith	27.9.2022	Host
Technology in the Clinic: Tips for Research and Implementation from a Clinical Perspective - IFESS Next Gen Webinar	Therese Johnston	11.10.2022	Host
New Functional Electrical Stimulation Clinical Practice Guidelines for Walking - Patient-centred webinar	Jane Burridge Sarah Joiner	25.10.2022	Host

