

# KÄRIN NICKELSEN

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## RESEARCH AREAS

History and philosophy of the modern biological sciences: practices of natural history (18/19th century), methodology of the experimental sciences (19th/20th century), cooperation across disciplinary cultures (19/20th century), life science and engineering for outer space, historical social epistemology and the generation of knowledge in scientific collectives.

## CURRENT POSITION

since Oct. 2011: Full Professor (W3; Chair) in History of Science, LMU Munich.

## PREVIOUS POSITIONS

2006-2011 Associate Professor History & Philosophy of Science, Univ. Bern, Switzerland  
2002-2006 Assistant Professor History & Philosophy of Science, Univ. Bern, Switzerland  
(Parental leave: 2006, 2004)

## EDUCATION

2010 Habilitation / *venia legendi* in History & Philosophy of Science, Univ. Bern, Switzerland  
2002 Ph.D. in History & Philosophy of Science, Univ. Bern, Switzerland; *summa cum laude*  
1999 Diploma in Biology, Univ. of Göttingen, Germany (Botany, Microbiology, History of Science);  
*with distinction*

## AWARDS AND HONOURABLE MEMBERSHIPS

2023 Full Member of the European Academy of Sciences  
2022 Fellowship at the Wissenschaftskolleg, granted for the academic year 2024/25.  
2021 *Interdisciplinary Panel Award*, ISHPSSB Biannual Conference, Cold Spring Harbor/USA  
2020- Full Member of the Academia Europaea  
2020- Full Member of the Bavarian Academy of Sciences and Humanities  
2019- Member of *Committee for Life Sciences*, German National Acad. of Sciences (Leopoldina)  
2018- Member of *Committee for Integrated History & Philosophy of Science* (20 members only)  
2017- Member of the *Centre for Advanced Study*, LMU Munich  
2011- Full Member of the German National Academy of Sciences (Leopoldina)  
2010 *Dalberg Award* for outstanding research at the interface of sciences and humanities  
2010 *Caspar Friedrich Wolff Medal* of the German Society for History and Theory of Biology  
2010 Nomination *Suzanne J. Levinson Award der History of Science Society*  
2005-2010 Member of the German *Young Academy*. Member of the Academy's board: 2008-2010  
2005 Honourable mention for the (global) *Prize for Young Scholars* in History & Philosophy of Science  
2002 *Wilhelm Dettmering Award* for Young Scholars in History of Science and Technology  
1990 Bronze Medal, International Biology Olympiad (in Makhachkala/Daghestan)

## ACTIVE RESEARCH GRANTS

2022- DFG Research Grant: "*Aggression, Conflict, and Peace: The Study of Human Aggression in West Germany, 1963-1990*".

- 2017- DFG Research Group “*Cooperation and Competition in the Sciences*”, spokesperson & PI; seven research projects, 19 scientific members (including PIs and young scholars). Sept. 2020: positive evaluation; second funding period granted (2021-2024).
- 2017- DFG Research Grant “*Cooperative Competition in Big Biology*” (as part of the group).

## GRANTS AND FELLOWSHIPS IN THE PAST

- 2021-2022 Research Grant “Teaching Materials in History and Philosophy of Science” in the Framework of the *Wissenschaftsjahr 2022 “Nachgefragt”* (German Fed. Ministry of Science & Education).
- 2019-2023 Research Grant “Strategic Partnership”. Joint project with the HPS Dept. Cambridge, UK: “*Plant Histories and Human Histories*”, combined with several workshops for PhD students.
- 2018-2021 DFG Research Grant: “*In Search for the Mechanisms of Life: Interdisciplinary Collaboration at the Interface of Biology, Chemistry, and Physics, 1918-1939*”
- 2016-2019 Member of research group “*Biology of Genomes*”, Center for Advanced Studies, LMU Munich
- 2016-2019 DFG Research Grant “*Competing Disciplines: The Sociobiology Debate and Beyond, 1970-90*”
- 2015-2018 DFG Research Project: “*Arts and Crafts in Eighteenth-Century Natural History*”
- 2013-2018 PI: International DFG Research Training Group: “*Religious Cultures in Europe, 19<sup>th</sup>-20<sup>th</sup> Century*” (Chair and Speaker: M. Schulze Wessel).
- 2014-2018 DFG Research Grant: “*Plants for Palestine: Science and Zionism, 1900-1930*”
- 2011-2014 DFG Research Network: “*Philosophy of the Life Sciences*” (Chair: M. Kronfeldner)
- 2010 SNF Research Grant: “*Models and Mechanisms in (Bio-)Chemistry*” (not transferable to Munich)
- 2008 Visiting Scholar, MPI for History of Science, Berlin (Dep. II)
- 2005 Visiting Scholar, Dep. Biophysics and Plant Biology, University of Illinois at Urbana-Champaign
- 1999-2002 Pre-doctoral Fellow, Swiss National Science Foundation (SNF)

(Grants for travel and conferences not listed.)

## ACADEMIC OFFICES AT LMU

- 2019- Dean of Studies, History Department LMU
- 2017- Co-Head of LMU Mentoring Programme for Excellent Early Career Scholars (Fak. 09)
- 2015- Member of Faculty Council (six elected representatives; responsible for hiring committees, administrative affairs, and strategic decisions). Repeatedly re-elected.
- 2022-2023 Co-Head of Support Programme for Ukrainian Scholars, History Department LMU (fundraising for stipends and scholarships and finding accommodation in Munich for 14 Ukrainian refugee scholars and their families; placement for further ca. 40 scholars elsewhere in Germany).
- 2013-2018 Board member, History Department LMU; Acting Director: 2014-2016, 2018-2019.
- 2014- Member of numerous hiring committees at LMU and elsewhere (national and international) for professorships in history of science and philosophy of science

## SUPERVISION OF GRADUATE STUDENTS (PRE- & POSTDOC) / TEACHING

- Ongoing: 9 PhD theses (7 as first supervisor); 6 habilitation theses (3 as head of committee).
- Completed: 24 PhD theses (8 as first supervisor); member of international PhD committees in Aarhus, Amsterdam, Vienna, and Princeton. External opponent for two promotion procedures at Copenhagen. Two habilitations completed (one as first supervisor).
- Since 2002: Teaching experience on undergraduate and graduate level. Supervision of numerous BA and MA theses as well as examination theses for teacher candidates.

## REFeree AND EXPERT ACTIVITIES

*Assessment of papers and book manuscripts for scholarly journals and publishing houses including:*  
 Univ. of Chicago Press; Pittsburgh Univ. Press; Austrian Academy of Sciences and Humanities Press; Studies in Hist. & Phil. of Biol. and Biomed. Sciences; Studies Hist. & Phil. of Life Sciences; Journal of the History of Biology (JHB); Historical Studies in the Natural Sciences (HSNS); History of Science;

History of Philosophy of Science (HOPOS); Science, Technology and Human Values; NTM; Journal of General Philosophy of Science; Notes and Records of the Royal Society; Nuncius; Taxon.

*Assessment of individual and group research proposals for (inter-)national funding agencies including:* German Research Foundation (DFG), German Federal Ministry of Education and Research (BMBF), Swiss National Research Council (SNF), Austrian Academy of Sciences and Humanities (ÖAW), Volkswagen Foundation, Thyssen Foundation, Alexander von Humboldt Foundation (AvH), Ernst August Bibliothek Wolfenbüttel, German Academic Scholarship Foundation (Studienstiftung des Deutschen Volkes), German Academic Exchange Service (DAAD), Institute for Advanced Study Princeton, Netherlands Institute for Advanced Study.

2019-23 Panel member, ERC Consolidator Grant (SH6: The Study of the Human Past)

## **SELECTED EDITING ACTIVITY, BOARD MEMBERSHIP, COMMITTEES, ETC. (PAST FIVE YEARS)**

2023- Chair of the Advisory Board of “Cuneiform Artefacts of Iraq in Context” (Long-term Project at the Bavarian Academy of Sciences and Humanities)  
2021- Board Member of “Ernst Haeckel Correspondence Project” (Leopoldina)  
2020- Board Member of “Project House Europe” (LMU Munich)  
2019- Editor-in-Chief: *Berichte zur Wissenschaftsgeschichte / History of Science and Humanities* (peer-reviewed journal; published with Wiley; listed in PubMed/MEDLINE, Impact Factor)  
2019- Jury Member: Johann-Bausch-Award for Early Career Scholars, Leopoldina  
2018- Board Member “Centre for Israel Studies” (LMU Munich)  
2017- Editor of book series *Wissenschaftskulturen* (Franz Steiner Verlag, Stuttgart)  
2015- Board member of scholarly journals: *Journal of the History of Biology* (2015-), *Sudhoffs Archiv* (2016-), *Studies in History & Philos. of Biol. and Biomed. Sciences* (2017-), *Medicine and the Life Sciences in History* (2021-), *Theory of Biosciences* (2023-).  
2016-2018 Member of the German National Committee “History of Science, Medicine, Technology”  
2013-2018 Spokesperson of the Munich Centre for History of Science and Technology (MZWTG)  
2013-2018 Spokesperson of the German professional association “History of Science”

## **SELECTED CONFERENCES (CO-)ORGANISED IN THE PAST FIVE YEARS**

Oct. 2024 Conference: “*Toward a History of the Sciences in the 1990s*” (Munich, 24/25.10.2024)  
Oct. 2023 Workshop: “*Model Cases in History and Philosophy of Biology*” (Ingolstadt, 12.09.2023)  
Oct. 2022 Workshop: “*Munich Research School: Experimentation*” (Munich, 21.10.2022)  
May 2021 Workshop: “*Munich Research School: Measurement*” (Munich, 20.-21.05.2021)  
Oct. 2020 Workshop: “*Cooperation and Competition in the Sciences*” (Munich, 8.-9.10.2020)  
Nov. 2019 Workshop: “*Collaboration and Competition in Biology*” (Munich, 15.-16.11.2019).  
March 2019 Workshop: “*Munich Research School: Social Epistemology*” (Munich, 22.-23.03.2019)  
March 2019 Workshop: “*Once Again, Method!*” (Berlin, 12.-16.03.2019); with Jutta Schickore (Bloomington), Hanne Andersen (Copenhagen).

## **SELECTED CONFERENCE PAPERS AND INVITED TALKS / KEYNOTES (2018-2023)**

Jan 2024 *Kollektiv und Kooperation: Zur Dynamik interdisziplinärer Forschungsfelder* (Mainz, 31 Jan 2024; Colloquium in History and Philosophy of Science).  
Dec 2023 *Too Green, Too Strange, Too Complicated: Methodische Friktionen zwischen Biologie und Physik* (Alfred-Krupp-Kolleg Greifswald, 7-9 Dec. 2023; Workshop: “Methodische Einheit oder Vielfalt der Wissenschaften”).  
Nov 2023 *Disciplinary Hybridity and the Art of Collaboration* (Amsterdam, 14-15 Nov. 2023; Workshop: “Epistemic Transfer in the History of the Sciences and Humanities”).  
Nov 2023 *Arten, Rassen, Varietäten: Menschliche Vielfalt ordnen* (Munich, 02 Nov. 2023; LMU Lecture Series: “Ausgegrenzt! Diskriminierung und Rassismus in Mittelalter und Renaissance”).

- Aug 2023 *Light and Life: Interactions between Physics and Biology, 1900-1950* (Niels-Bohr-Institute, Copenhagen, 07-09 August 2023; Workshop: "Crossing the Disciplinary Boundaries of Physics: Bohr-100 Centennial Celebrations").
- Jun 2023 *Ambivalenzen der Analogie: Die Biochemie und ihre Bilder im 19. Jahrhundert* (München; 22-23 June 2023; Workshop: "Die unsichtbare Ubiquität der Wissenschaftsrhetorik").
- Jun 2023 *Searching the Origins of Wheat: Economic Botany between Bonn, Berlin, and Palestine* (Museum Koenig, Bonn; 11 May 2023; Workshop: "Space, Time, Plants, and Paper: The Value of Biodiversity Knowledge from Colonial Origins to Global Heritage").
- Mar 2023 *Die Biologie der Pflanzen, ca. 1900* (Leuphana Universität Lüneburg; 23 March 2023; Workshop: "Perspektiven einer Geschichte ökologischen Wissens").
- Feb 2023 *Wechselwirkung: Kooperation und Konkurrenz in den Wissenschaften*. (Heinrich-Heine-University Düsseldorf; 2 Feb. 2023; Strategic Retreat of Medical Faculty; Keynote)
- Dec 2022 *Life Support Systems : New Perspectives on the History of Habitability* (Collège de France, Paris; 5 Dec. 2022)
- March 2022 *Explaining Forms and Functions in Nineteenth-Century Botany* (Bloomington, 2-5 Mar. 2022; Conference: „Rigor: Experimental Control, Analysis, Synthesis“)
- Oct. 2021 *Julius Wiesner und die neue Biologie in Wien, ca. 1850-1914* (Vienna, 14./15. Oct. 2021. Symposium: „From the Sciences of Life to the Life Sciences in Central Europe“)
- July 2021 *One Biochemistry or Many?* (ICHST Congress July 25-31; Panel on "Revisiting the history of biochemistry and its neighbours in the first half of the twentieth century")
- July 2021 *"Your Genitals Don't Lie" An escorted encounter with the history and philosophy of phallic and cervical measuring* (ISHPSSB biannual conference; with Rebecca Jackson, Jutta Schickore, Caterina Schürch, Merlin Wassermann). *Interdisciplinary Panel Prize 2021*.
- May 2021 *Disciplinary Hybridity and the Art of Collaboration: The Case of Photosynthesis Research* (Univ. of Amsterdam/NL, 6./7.05.2021; Workshop: „How Disciplines Interact“)
- Jan. 2020 *C. J. Trew und seine Künstler: Ein Blick in die Werkstätten botanischer Illustration* (Erlangen, 13.01.2020; Keynote)
- Nov. 2019 *Cooperative Division of Cognitive Labour: The Social Epistemology of Photosynthesis Research* (HPS Department, Cambridge/UK, 21.11.2019)
- Oct. 2019 *Methodological Innovation and Scientific Change: How Manometry Reconfigured Twentieth-Century Photosynthesis Research* (Indiana Univ., Bloomington; 31.10.2019)
- Sept. 2019 *Cooperation and Competition in the Sciences: Strategies in Twentieth-Century Small and Big Biology* (Copenhagen, 09.09.2019)
- July 2019 *Botany and the Science of History* (Utrecht 25.07.2019; Annual Meeting of the History of Science Society; organised panel "Natural and Cultural Histories", with Fabian Krämer).
- July 2019 *In Pursuit of the Origin of Wheat: How 19th-Century Botanists Claimed a Role in Writing the History of Civilization* (Botany Department, LMU Munich, 17.07.2019).
- May 2019 *Navigating Interdisciplinarity: How to Sit Comfortably between the Chairs* (Berlin 08.05.2019; Symposium of Research Group Leaders, Max Planck Society)
- May 2019 *Wie die Biologie zur Informationswissenschaft wurde* (Berlin / Leopoldina, 03.05.2019).
- Feb. 2019 *Interactions and Interdependencies: History of Science and Philosophy of Science as Friends with Benefits* (Cologne, 25.-27.02.2019; German Society Phil. Science, Keynote).
- Jan. 2019 *Farben und Formen: Illuminierpraktiken in botanischen Abbildungen um 1800* (Colloquium TU Berlin, 21.01.2019).
- Oct. 2018 *Kompetitive Zusammenarbeit, kooperativer Wettbewerb: Verschränkte Handlungsmodi im wissenschaftlichen Internationalismus* (Göttingen, 15.-16.11.2018; Keynote).
- July 2018 *Building Blocks and the Principle of Plurality: Model Building Heuristics in Long-Term Research Collectives* (Hannover, 5.-7.7.2018; &HPS7).
- April 2018 *Objectivity in Practice: How to Tell Bias from Truth from Rhetoric* (Munich; Workshop on the history and philosophy of "Objectivity").

## PUBLICATIONS

### Books

Munns, D.P.D.; Nickelsen, K. (2021): *Far beyond the Moon: A History of Life Support Systems in the Space Age* (Pittsburgh Univ. Press).

Nickelsen, K. (2015): *Explaining Photosynthesis. Models of Biochemical Pathways, 1840-1960*. Springer (Series: History, Philosophy and Theory of the Life Sciences, Vol. 8).

Nickelsen, K.; Govindjee (2011): *The Maximum Quantum Controversy: Otto Warburg and the „Midwest-Gang“*. Bern Studies in the History and Philosophy of Science, Bern.

Nickelsen, K. (2006): *Draughtsmen, Botanists and Nature. The Construction of Eighteenth-Century Botanical Illustrations* (Archimedes Series; Ed. Jed Z. Buchwald). Springer, Berlin etc.

Nickelsen, K., Hool, A., Graßhoff, G. (2004): *Theodore von Kármán: Flugzeuge für die Welt und eine Stiftung für Bern*. Birkhäuser, Basel.

Graßhoff, G.; Liess, H.-C.; Nickelsen, K. (2001): *COMPAGO: Der systematische Bildvergleich. Handbuch zum Programm*. Bern Studies in the History and Philosophy of Science, Bern, 2001.

Graßhoff, G., Casties, R. & Nickelsen, K. (2000): *Zur Theorie des Experiments. Untersuchungen am Beispiel der Entdeckung des Harnstoffzyklus*. Bern Studies in the History and Philosophy of Science, Bern.

Nickelsen, K. (2000): *Wissenschaftliche Pflanzenzeichnungen – Spiegelbilder der Natur? Botanische Abbildungen aus dem 18. und frühen 19. Jh.* Bern Studies in the History and Philosophy of Science, Bern.

### Edited Volumes

Keuck, L.; Nickelsen, K. (2022): On Epistemic Times: Writing History 25 Years after Synthesizing Proteins in the Test Tube, *Berichte zur Wissenschaftsgeschichte / History of Science and Humanities*, Vol. 45/3 (2022). (240 pages, i.e. book-length issue).

Nickelsen, K.; Joas, C.; Krämer, F. (2019): Wissen/schaft/sgeschichte – History of Science or History of Knowledge? (= Topical Collection), *Berichte zur Wissenschaftsgeschichte / History of Science and Humanities*, Vol. 42 2/3 (2019).

Wissemann, V.; Nickelsen, K. (2018): *Catalogus ad collectionem Materiae Medicae in Academia Georgia Augusta. Katalog der Pharmakognostischen Sammlung der Univ. Göttingen*. Univ.verlag Göttingen.

Meunier, R.; Nickelsen K. (2018): New Perspectives in the History of Twentieth-Century Life Sciences (= Topical Collection), *History and Philosophy of the Life Sciences*. ISSN: 0391-9714 (Print); 1742-6316. (Online). [https://link.springer.com/journal/40656/topicalCollection/AC\\_3e1f3fa9d204bf93d2b0c0c8f65aaf54](https://link.springer.com/journal/40656/topicalCollection/AC_3e1f3fa9d204bf93d2b0c0c8f65aaf54)

Aue Ben-David, I.; Brenner, M.; Nickelsen K. (2017): *The Humanities between Germany and Israel* (= Special Issue in deutscher und englischer Sprache), *Naharaim. Zeitschrift für deutsch-jüdische Literatur- und Kulturgeschichte*. Vol. 11.

Nickelsen K., Alfieri, F. (2017): Science and Religion: Revisiting a Complex Relationship (= Special Issue; in englischer Sprache), *Annali dell'Istituto storico italo germanico in Trento*. Vol. 43, 1/2.

Nickelsen, K. (2017): *Die Entdeckung der Doppelhelix. Die grundlegenden Arbeiten von Watson, Crick und anderen*, eingeleitet und kommentiert von Kärin Nickelsen. Springer, Dordrecht u.a.

Nickelsen K., Krämer, F. (2016): *Cooperation and Competition in the Sciences* (= Special Issue), *NTM*.

Nickelsen K., Suffrin, D. (2014): *Zionismus und Naturwissenschaft* (Münchner Beiträge zur Jüdischen Geschichte und Kultur 8), München.

Nickelsen, K., Graßhoff, G. (2001): *Pflanzenbilder als Ausdruck wissenschaftlicher Inhalte. Elektronische Edition botanischer Abbildungen aus dem 18. und frühen 19. Jahrhundert*. Online Edition: <http://www.philoscience.unibe.ch/docuserver/echo/projekte/botany/index.html>

Graßhoff, G., Nickelsen K. (2001, 2002): *Dokumente zur Entdeckung des Harnstoffzyklus. Band I: Laborbuch Hans Krebs und Erstpublikationen. Band II: Laborbuch Kurt Henseleit*. Bern Studies in the History and Philosophy of Science, Bern.

## Journal Papers

Chen, E.; Keuck, L.; Nickelsen, K. (2022): The Politics of Sources Meets the Practices of the Librarian, *Berichte zur Wissenschaftsgeschichte / History of Science and Humanities*, Vol. 45/3 (2022), 508-516.

Keuck, L.; Nickelsen, K. (2022): Introduction: Embracing Ambivalence and Change. *Berichte zur Wissenschaftsgeschichte/ History of Science and Humanities* 45 (2022), 291-300.

Krämer, F.; Nickelsen, K.; Suffrin, D. (2022): Botany and the science of history: Nature, culture, and the origins of civilization, ca. 1850-1900. *Isis* 113 (2022), 45-62.

Nickelsen, K. (2021): Cooperative division of cognitive labour: The social epistemology of photosynthesis research. *Journal of General Philosophy of Science* 53 (2022), 23-40. DOI: 10.1007/s10838-020-09543-1. Online first: <http://link.springer.com/article/10.1007/s10838-020-09543-1> (19 March 2021).

Musil-Gutsch, J.; Nickelsen, K. (2020): Ein Botaniker in der Papiergeschichte: Geschlossene und offene Kooperationen in den Wissenschaften um 1900. *NTM* 28 (2020), 1-34. (Link: <https://rdcu.be/b1TXN>)

Nickelsen, K.; Joas, C.; Krämer, F. (2019): Introduction: History of Science or History of Knowledge? *Berichte zur Wissenschaftsgeschichte/ History of Science and Humanities* 42 (2019), 117-125.

Nickelsen, K.; Soutschek, L. (2019): "Zusammenwirken" oder "Wettstreit der Nationen"? Kooperation und Konkurrenz in der deutschen Antarktisexploration um 1900. *NTM* 27 (2019), 229-264.

Nickelsen, K. (2019): Physicochemical biology and knowledge transfer: The study of the mechanism of photosynthesis between the two World Wars. *Journal of the History of Biology* (2019), pp. 1-29. Online available at: DOI: 10.1007/s10739-019-9559-x. (Printed: *JHB* 55 (2022), 349-377).

Nickelsen, K. (2018): Die Zukunft der Wissen/schaft/sgeschichte. *Berichte zur Wissenschaftsgeschichte* 41 (2018), 409-412.

Nickelsen, K. (2018): On Otto Warburg, Nazi bureaucracy and the idiosyncrasy of moral judgment. *Photosynthetica* 56, 75-86.

Munns, D.P.D.; Nickelsen, K. (2018): To live among the stars: Artificial environments in the early space age. *History and Technology* 33, 272-299.

Meunier, R.; Nickelsen, K. (2018): New perspectives in the history of twentieth-century life sciences: historical, historiographical and epistemological themes. *History and Philosophy of the Life Sciences* 40: 19. DOI: <https://doi.org/10.1007/s40656-018-0184-3>.

- Aue Ben-David, I.; Brenner, M.; Nickelsen K. (2017): Deutsch-israelische Annäherungen in Geisteswissenschaften und Kulturpolitik. In: Dies. (Hg.): *The Humanities between Germany and Israel Naharaim. Zeitschrift für deutsch-jüdische Literatur- und Kulturgeschichte*. Vol. 11, 5-11.
- Nickelsen, K.; Alfieri, F. (2017): Introduction. *Annali dell'Istituto storico italo germanico in Trento 4 (2017/1; Special Issue: Science and Religion: Revisiting a Complex Relationship)*, 9-17.
- Nickelsen, K. (2017): The organism strikes back: *Chlorella* algae and their impact on photosynthesis research, 1920s-1960s. *History and Philosophy of the Life Sciences* 39:9 (22 Seiten).
- Nickelsen, K. (2016): *Otto Warburg, die Quanten und die Photosynthese*. *Acta Hist. Leop.* 65, 37-64.
- Leber, C.; Nickelsen, K. (2016): Wissenschaft im Glaubenskampf. Geschichte als Argument in den akademischen Festreden Emil DuBois-Reymonds. *Berichte zur Wissenschaftsgesch.* 39, 143-164.
- Nickelsen, K.; Krämer, F. (2016): Introduction: Cooperation and competition in the sciences. *NTM* 24 (2016), 119-124.
- Nickelsen, K.; Scholl, R. (2015): Discovery of causal mechanisms. Oxidative phosphorylation and the Calvin-Benson cycle. *History and Philosophy of the Life Sciences* 37, S. 180-209.
- Nickelsen, K. et al. (2013): Philosophie der Lebenswissenschaften. Entwicklungen und Tendenzen. *Information Philosophie*, 14-27.
- Nickelsen, K. (2012): From the Red Drop to the Z-scheme of photosynthesis. *Annalen der Physik* 524 (11), A157-A160.
- Nickelsen, K. (2012): Of light and darkness: Modelling photosynthesis 1840-1960. *Verhandlungen zur Geschichte und Theorie der Biologie* 17, 13-36.
- Nickelsen, K. (2012): The path of carbon in photosynthesis: How to construct a model of a biochemical pathway. *Ambix* 59, 266-293.
- Nickelsen, K.; Grasshoff, G. (2011): In pursuit of formaldehyde: Causally explanatory models and falsification. *Studies in History and Philosophy of Biological and Biomedical Sciences* 42, 297-305.
- Nickelsen, K. (2009): From leaves to molecules: Botany and the development of photosynthesis research. *Annals of the History and Philosophy of Biology* 12, 1-40.
- Nickelsen, K. (2009): The construction of a scientific model: Otto Warburg and the photolyte. *Studies in History and Philosophy of Biological and Biomedical Sciences* 40, 73-86.
- Nickelsen, K. (2008): Ein bisher unbekanntes Zeitzeugnis: Otto Warburgs Tagebuchnotizen von Februar bis April 1945. *NTM* 16, 103-115.
- Amrein, M.; Nickelsen, K. (2008): The gentleman and the rogue: The collaboration between Charles Darwin and Carl Vogt. *Journal of the History of Biology* 41, 237-266.
- Nickelsen, K. (2007): Otto Warburg's first approach to photosynthesis. *Photos. Research* 92, 109-120.
- Nickelsen, K. (2007): „Abbildungen belehren, entscheiden Zweifel und gewähren Gewissheit“. Funktionen botanischer Abbildungen im 18. Jh. *Wiener Zeitschrift zur Geschichte der Neuzeit* 7, 52-68.
- Nickelsen, K. (2007): „In deutlichen Beschreibungen und richtigen Zeichnungen gemeinnützig“. Abbildungen in der Gesellschaft Naturforschender Freunde zu Berlin (GNF), 1773-1800. *Annals of the History and Philosophy of Biology* 11, 155-176.

Nickelsen, K. (2006): Von Bildern, Herbarien und schwarzen Abdrücken. Repräsentation von Pflanzenarten um 1800. *Hausknechtia* 11, 149-166.

Nickelsen, K. (2006): Wer oder was ist ein Ehrenmitglied? Diskussionen und Praktiken in der Regensburgischen Botanischen Gesellschaft, 1790-1800. *Hoppea* 67, 271-288.

Nickelsen, K. (2006): „On employera les meilleurs Graveurs pour les Figures“. Zeichner und Stecher der Berliner Akademie der Wissenschaften 1700-1806. *Berichte zur Wissenschaftsgeschichte* 29, 293-308.

Nickelsen K. (2006): Botanists, draughtsmen and nature. The construction of eighteenth-century botanical illustration. *Studies in History and Philosophy of Biological and Biomedical Sciences* 37, 1-25.

Nickelsen K. (2006): The challenge of colour. Eighteenth-century botanists and the hand-colouring of illustrations. *Annals of Science* 63, 3-23.

Nickelsen, K., Liess, H.-Ch. (2003): Geschichte, Gehalt und Veränderung wissenschaftlicher Abbildungen. *Bildwelten des Wissens: Kunsthistorisches Jahrbuch für Bildkritik*. Vol. 1, 116-119.

Nickelsen, K., Wissemann, V. & Harnischfeger, G. (1999): Geschichte, Probleme und Perspektiven der Göttinger Pharmakognostischen Sammlung. *Pharm. Ztg.* 144.6, 62-64.

## Book Chapters

Nickelsen, K. (2024): Friedrich A. Körnicke and the Origins of Wheat. Economic Botany between Bonn, Berlin, and Palestine. In: Schmidt-Loske, K. et al.: *Proceedings: Space, Time, Plants, and Paper. The Value of Biodiversity Knowledge from Colonial Origins to Global Heritage* [in print].

Nickelsen, K. (2024): Controlling Nature in the Lab and Beyond: Methodological Predicaments in Nineteenth-Century Botany. In: Schickore, J.; Newman W.: *Elusive Phenomena, Unwieldy Things. Historical Perspectives on Experimental Control (Archimedes Series)*. Springer, pp. 179-207

Nickelsen, K. (2023): Julius Wiesner und die neue Biologie. In: Ash et al.: *Von einer Wissenschaft des Lebens zu den Lebenswissenschaften in Zentraleuropa*. LIT-Verlag, pp. 87-104.

Nickelsen, K. (2023): Kunstwerk, Handwerk, Wissenschaft: Botanische Abbildungen des 18. Jahrhunderts. In: Gropper, S. et al.: *Plurale Autorschaft. Ästhetik der Co-Kreativität in der Vormoderne*. De Gruyter, pp. 353-380.

Nickelsen, K. (2021): Zierrat und Nutzen: Die *Plantae Selectae* von Christoph Jacob Trew und andere botanische Tafelwerke um 1800. In: Dickel, H. et al.: *Christoph Jacob Trew als Sammler und Gelehrter*. Hiersemann, pp. 291-310.

Nickelsen, K.; Schürch, C. (2020): Die Dynamik disziplinenübergreifender Forschungsfelder. In: M. Jungert (Hg.): *Wissenschaftsreflexion*. Suhrkamp, pp. 161-198.

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