#### **Curriculum Vitae**

ORCID: https://orcid.org/0000-0002-8761-8289

Google Scholar: https://scholar.google.com/citations?user=YILt54YAAAAJ&hl=en

### Addresses

Leibniz Institute on Aging

Beutenbergstrasse 11 Tel: +49 (3641) 65-6280

07745 Jena, Germany Email: dvalenzano@leibniz-fli.de

Max Planck Institute for Biology of Ageing

Joseph-Stelzmann Str. 9b Email: dvalenzano@age.mpg.de

50931, Cologne, Germany

Academic status

From July 2021 Full Professor at the Friedrich Schiller University of Jena (Germany) and

Senior Researcher at the Leibniz Institute on Aging (Fritz-Lippman Institute)

Tel: +49 (0)221 379 70 490

2013-2021 Max Planck Research Group Leader (equivalent to Associate Professor),

Max Planck Institute for Biology of Ageing

Education

April 2006 Ph.D. in Neuroscience, Scuola Normale Superiore, Pisa, Italy December 2002 Diploma in Biology at Scuola Normale Superiore, Pisa, Italy October 2001 BSc and MSc in Biology at the University of Pisa, Pisa, Italy

Research Experience

Jan 2016 – present CECAD Principal Investigator, CECAD, University of Cologne

Jun 2013 – present Max Planck Research Group Leader

Max Planck Institute for Biology of Ageing

May 2011 – May 2013 Research Associate

Stanford University, Department of Genetics (Brunet lab)

May 2006 – Apr 2011 Postdoctoral Fellow

Stanford University, Department of Genetics (Brunet lab)

Jan 2003 – Apr 2006 Graduate Student in Neurobiology at Scuola Normale Superiore,

Pisa, Italy (Cellerino lab)

Aug 2000 – Dec 2002 Undergraduate Thesis Research

ISTC of the CNR, Rome, Italy

Awards and Honors

2019 Nathan Shock New Investigator Award 2018-2021 EMBO YIP Young Investigator Award 2010-2011 Ellison/AFAR postdoctoral fellowship

2007-2010 Stanford Center on Longevity postdoctoral fellowship
2006 First prize at the Stanford Genetics Retreat poster session
2005 Young Researcher Scuola Normale Superiore Award
2004 Young Researcher Scuola Normale Superiore Award
2003 Young Researcher Scuola Normale Superiore Award
2002 University of Pisa Gold Medal for outstanding curricular

achievements

1999 Scuola Normale Superiore undergraduate scholarship

List of current third-party grants

2018-2021: DFG (SFB) CRC 1310 "Predictability in Evolution": Funded four-year

grant on "Co-evolution of gut microbiota and immune cells during

ageing in killifish".

2018-2021: EMBO Young Investigator (YIP).

2019-2020: NRW 80+: research grant to study the microbiome-immune axis in an

elderly human patient cohort.

2019-2020: CECAD seed funding "Microbiome dynamics in a longitudinal mouse

cohort: predicting individual mouse lifespan from stool microbiome

composition and metabolic profile".

	composition and metabolic profile.
Presentations	S
2002	Associazione Italiana di Primatologia, Rome, IT
2004	Evolution and Human Behavior meeting, Berlin, GE
2004	Italian Organization of Science Teachers (ANISN), Viareggio, IT
2005	International Symposium on Neuroplasticity, Pisa, IT
2008	Aging Symposium: Linking Evolution to Mechanisms, Fribourg, CH
2009	Stanford Current Issues in Genetics, Stanford, CA, US
2009	Lunch Bunch UC Riverside Seminar Series, Riverside, CA, US
2009	Stanford Center on Longevity, Stanford, CA, US
2010	Stanford Current Issues in Genetics, Stanford, CA, US
2010	Bay Area Aging Meeting Club, San Francisco, CA, US
2010	Longevity Consortium, Washington D.C., US
2010	Molecular Genetics of Aging, Cold Spring Harbor, NY, US
2010	Bay Area Population Genetics Meeting, Stanford, CA, US
2011	Buck Institute for Aging Research, Novato, CA, US
2011	Scuola Normale Superiore, Pisa, IT
2011	University of Pisa, Dept. Biologia Cellulare, Pisa, IT
2011	Max-Planck Institute for the Biology of Ageing, Cologne, DE
2012	Harvard University, Department of MCB, Cambridge, MA, US
2012	UC Berkeley, Department of MCB, Berkeley, CA, USA
2012	Max-Planck Institute for the Biology of Ageing, Cologne, DE
2012	American Kllifish Association, WKW, Portland, OR, US
2012	University of Alabama at Birmingham, NORC, Birmingham, AL, US
2012	ENDO 2012, Houston, Tx, US
2012	DGIST, Hyeonpung-Myeon, Daegu, SK
2013	Max-Planck Institute for the Biology of Ageing, Cologne, DE
2014	1 <sup>st</sup> Nothobranchius Symposium, Pisa, Italy
2014	Poppelsdorfer Schlossgespräche: University of Bonn, DE
2014	SFB670 – Cell-autonomous Immunity CECAD, Cologne, DE
2014	IRB, Barcelona, ES
2015	ERIBA, Groningen, NL
2015	MPI Molecular Biomedicine, Münster, DE
2015	SFB680, Institute for Theoretical Physics, Cologne, DE
2015	King's College, MCR Centre for Dev Neurobiol, London, UK
2015	Babraham Institute, University of Cambridge, Cambridge, UK
2015	Max Planck Institute for Plant Breeding, Cologne, DE
2015	Francis Crick Institute, London, UK
2015	Department of Zoology, University of Cambridge, Cambridge, UK
2015	German Association for Aging Research (DGfA), Jena, DE
2016	DZNE, Munich, DE
2016	2 <sup>nd</sup> Cologne Ageing Conference, Cologne, DE
2016	2 <sup>nd</sup> Nothobranchius Symposium, Jena, DE
2016	Max Planck Institute for Developmental Biology, Tuebingen, DE
2016	CSHL, Mechanisms of Aging, Cold Spring Harbor, USA
2016	University of Bern, Bern, CH
2016	Eawag Institute, Zürich, CH
2016	Cellular Mechanisms of Neurodegeneration, Eibsee, DE
2016	CECAD Faculty Retreat, Cologne, DE
2016	Forum Scientiarum, University of Tuebingen, Tuebingen, DE
2016	1st International Symposium Research on Healthy Ageing, Lille, FR
2017	GIF Young Scientists' Meeting, Ma'ale Ha-Hamisha, IL

2017	LCSB, Luxembourg Center for Systems Biomedicine, Luxembourg, LU
2017	Scuola Normale Superiore di Pisa, Pisa, IT
2017	ICM Institute for Brain and Spinal Cord, Paris, FR
2017	American Aging Association, NY, US
2017	GRC, "Aging, Biology of", Les Diablerets, CH
2017	GRC, "Ecological and Evolutionary Genomics", Biddeford, US
2017	Jackson Laboratory, Farmington, US
2017	· · · · · · · · · · · · · · · · · · ·
	14 <sup>th</sup> Transgenic Technology Meeting, Salt Lake City, US
2017	Leibniz Institute on Aging, Jena, DE
2017	IFOM, Milan, IT
2017	Symposium on Innovative Models in Infection and Immunity, Lille, FR
2017	EMBO, Heidelberg, DE
2017	BMS Symposium, MPG, Berlin, DE
2017	Oxford University, Zoology Department, Oxford, UK
2017	AGEART, MPI-AGE, Cologne
2017	Exploratory Round Table Conference (MPG, CAS), Shanghai, CN
2018	Healthy Ageing: from molecules to organisms, Hinxton, UK
2018	KU Leuven, Leuven, BE
2018	Keystone Symposium Aging, Inflammation and Immunity, Austin, US
2018	MyAgeGroup Symposium, Austin, US
2018	Microbiome in Host Physiology and Aging Workshop, Singapore, SG
2018	Humans and the Microbiome (CIFAR), NTU, Singapore, SG
2018	Journée de la Recherche Translationelle, Pasteur Institute, Paris, FR
2018	Interventions to extend healthspan and lifespan, Kazan, RU
2018	Annual EMBO YIP meeting, Vienna, AT
2018	University of Pisa, Cellular and Developmental Biology, Pisa, IT
2018	Seminar über Versuchstiere und Tierversuche, BfR, Berlin, DE
2018	Old Herborn University Seminars, "Aging and the Microbiome", DE
2018	University of Kiel, CRC/SFB 1182, Kiel, DE
2018	Max Planck Institute for Ornithology, Seewiesen, DE
2018	Microbiological Colloquium (SFB 766), Tübingen, DE
2018	UK Genome Science, Nottingham, UK
2018	Models and insights in translational research, Goethe U, Frankfurt, DE
2018	Cell Symposium Aging and Metabolism, Sitges, ES
2018	Mechanisms of Aging, CSHL, Cold Spring Harbor, NY, US
2018	Frontiers in Aging, Moscow State University, Moscow, RU
2018	Bioscience Symposium Complexity of Aging, Copenhagen, DK
2018	MRC London Institute of Medical Sciences, London, UK
2018	Aquatic Models to study regeneration and aging, IRCAN, Nice, FR
2018	IPMM/IPHS graduate program on Molecular Medicine, Cologne, DE
2018	EMBO YIP Sectorial Meeting in Microbiology, Heidelberg, DE
2018	DGfA meeting, Jena, DE
2018	CECAD annual retreat, Cologne, DE
2019	1 <sup>st</sup> Crick-Beddington DevBio Symposium, Crick Institute, London, UK
2019	Genetic, Evolution and Environment Lecture, UCL, London, UK
2019	CDDF Workshop on Cancer Growth and Therapy, Munich, DE
2019	Helsinki Institute of Life Science, Helsinki, FI
2019	John Stuart Mill College, Vrij Universiteit, Amsterdam, NL
2019	NUS, Singapore, SG
2019	EMBO YIP, Singapore, SG
2019	Genome Editing for Comparative Genomics, JEB, Massa Marittima, IT
2019	GSK, Siena, IT
2019	Max Planck Institute for Chemical Ecology, Jena, DE
2019	Hallmarks of Biological Failure, Santa Fe Institute, Santa Fe, US
2019	Model organisms for the study of aging and disease, Lausanne, CH
2019	EMBL, Unit of Developmental Biology, Heidelberg, DE
2019	Quadram Institute, Norwich, UK
_0.0	addaran monato, monaton, ort

2019	FLI Colloquium, Jena, Leibniz Institute on Aging, DE
2019	Keynote seminar at the 5 <sup>th</sup> Annual ISEMPH meeting, Zurich, CH
2019	EMBO YIP Evolution Sectorial Meeting, Basel, CH
2019	PhD Day, IRCAN, Nice, FR
2019	1st European Geroscience Conference, Madrid, ES
2019	Beyond the Standard: Non-model Vertebrates in Molecular Biomedicine, EMBO
2010	Workshop, MDC, Berlin, DE
2019	Associatión Latinoamericana de Genética, ALAG, Mendoza, AR
2019	120 <sup>th</sup> Intl Titisee Conference "Evolution of Immune Defense Mechanisms" Titisee,
2010	DE
2019	Department of Genetics, University of Bari, IT
2019	Max Planck for Chemical Ecology, Jena, DE
2019	Gutenberg Workshop: The Biology of Ageing, Mainz, DE
2019	CRC 1310 midterm symposium, Cologne, DE
2019	Microbiota and Aging Symposium, CECAD, University of Cologne, DE
2019	Gerontological Society of America, Austin, US
2019	ICMM annual meeting, University of Copenhagen, Helsingør, DK
2019	BIG Talk, Faculty of Biology and Medicine, University of Lausanne, Lausanne CH
2020	Microbiota and Aging Symposium, Leibniz Institute, Jena, DE
2020	Hohenheim University, Stuttgart, DE
2020	Department of Genetics, University of Cologne, Cologne, DE
2020	Seminar at PRBB, Barcelona, ES
2020	Museum Mensch und Natur, Munich, DE
2020	Keynote seminar, Signalife, Nice, FR
2020	Intra- and Inter-cellular mechanisms of Aging, Keystone meeting, Vancouver, CA
2020	ZMBH, University of Heidelberg, Heidelberg, DE
2020	Brown University Colloquium on the Biology of Human Aging, video conference
2020	AgingScienceTalks, video seminar
2020	Institute Gulbenkian de Ciência, video seminar
2020	7 <sup>th</sup> Aging Research & Drug Discovery Meeting (ARDD), video seminar
2020	Michigan State University Ecology, Evolution and Behavior, video seminar
2020	University of Muenster, Muenster, DE
2020	TU Dresden, CMCB program (video)
2020	Keynote talk, SynAge annual retreat, University of Magdeburg, DE (video)
2020	Erasmus Medical Center, Rotterdam (video)
2020	BTI-PGS Virtual distinguished lecture, Cornell University (video)
2020	2020 Molecular Biology Society of Japan (video)
2020	eLife Symposium: Aging, Geroscience and Longevity (video)
2021	MolMet webinar, Karolinska Institute (video)
2021	Aarhus University, Kjeldgaard Lectures (video)
2021	Life Science Switzerland (LS2), keynote (video)
2021	USC L. Davis School of Gerontology, L.A., US (video)
2021	University of Leicester, UK (video)
2021	Max Planck Lecture, MPFI, US (video)
2021	Keynote Speaker, 3rd International Symposium of the RTG1743, DE (video)
2021	Basic Biology of Aging Spring Speaker Series, UW in Seattle, US (video)
2021	Seeon Conference – Microbiota, Probiotics and Host, Keynote speaker, DE (video)
2021	Max Planck Institute for Developmental Biology, Tuebingen, DE
2021	8 <sup>th</sup> Aging Research & Drug Discovery Meeting (ARDD), Copenhagen, DK
2021	International African Turquoise Killifish Conference, MDI BL, Bar Harbor, US
2021	EMBO YIN evolution sectoral meeting (online)
2021	International Congress of Zoology (online)
2021	EMBO YIN microbiology sectoral meeting, Bordeaux, FR
2022	IPMM Web-Lecture Molecular Medicine (online)
2022	"Balance of the Microverse" Cluster of Excellence (online), Jena, DE
2022	Interdisziplinäres Zentrum für Klinische Forschung (online), Jena, DE
2022	2nd Euro-Geroscience Conference, Toulouse, FR

2022 UMC and Hubrecht Institute, Utrecht, NL

2022 European Institute of Technology, Health Aging advanced course (online)

#### Professional memberships and activities

German Association for Aging Research (DGfA)

Faculty of 1000 (F1000)

Board member, graduate school of Biology, University of Pisa, Pisa, Italy Cologne Graduate School on Aging, committee member, Cologne, Germany

## Organization of meetings and symposia

2012	discussion leader, Gordon Research Seminar, Biology of Aging
2015	moderator, German Association for Aging Research
2016	organizer, Second Nothobranchius Symposium
2018	organizer, 2018 Nothobranchius Symposium
2019	discussion leader, GlaxoSmithKlein "Palio Meeting" on the future of vaccines
2019	vice-chair, Gordon Research Conference, Biology of Aging
2021	chair, 2 <sup>nd</sup> eLife symposium on Aging, Geroscience and Longevity
2021	2021 Nothobranchius Symposium
2021	EMBO/YIN Evolution Sectoral Meeting
2022	Annual Meeting of the German Society for Aging Research
2023	chair, Gordon Research Conference, Biology of Aging

### Serving on editorial board

Aging Cell eLife

### Reviewing activities

Scientific journals: Aging Cell; Aging and Mechanisims of Disease; BBA – Molecular Basis of Disease; Cell Reports; Current Biology; Developmental Dynamics; Development Genes and Evolution; eLife; Frontiers in Microbiology; Experimental Gerontology; Fishes; G3: Genes, Genome, Genome Biology; Genome Research; Genetics; Gut Microbes; Hormone and Metabolic Research; Invertebrate Reproduction and Behavior; iScience; Journal of Comparative Physiology B; Journal of Experimental Biology; the Lancet Healthy Longevity; Microbial Cell; Microbiome; Molecular Biology and Evolution; Molecular Phylogenetics and Evolution; Nature; Nature Aging; Nature Communications; Nature Medicine; Nature Protocols; PLoS Genetics; PLoS ONE; PNAS; Proceedings of the Royal Society B; Science; Science Advances; Scientific Reports; Trends in Genetics.

Scientific publishers: Chigago University Press, Oxford University Press.

"Eat less, live more", The Economist

Research Grants: AFAR, Blood Cancer UK, Czech Science Foundation, DFG, ERC, HSFP, INSPIRE Geroscience, Polish National Science Centre, SWO (Belgium), Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Università di Camerino (Italy), Swiss National Science Foundation, Wellcome Trust.

## Media coverage

2006

	http://www.economist.com/node/6823498
2015	"A model for ageing", Max Planck Gesellschaft news
	http://tinyurl.com/oykxp92
2015	"Short-lived fish may hold clues to human ageing"
	http://www.nature.com/news/short-lived-fish-may-hold-clues-to-human-ageing-
	1.18945
2016	"Live fast, die young", Nature   Technology feature
	http://www.nature.com/nature/journal/v535/n7612/full/535453a.html
2016	"Dem Traum der ewigen Jugend auf der Spur" BR Wissen
	http://www.br.de/themen/wissen/altern-alterungsprozess-tierwelt-100.html
2017	"Young poo makes aged fish live longer" Nature News
	http://www.nature.com/news/young-poo-makes-aged-fish-live-longer-1.21770
2017	

2017	"A fishy way to longevity: young poo" Science http://www.sciencemag.org/news/sifter/fishy-way-longevity-young-poo
2017	"Youthful poo makes aged fish live longer" Scientific American
2017	https://www.scientificamerican.com/article/youthful-poo-makes-aged-fish-live-longer/ "Wired awake: 10 must read articles for April 6" Wired
2017	http://www.wired.co.uk/article/wired-awake-060417 "Biology gone wild" Cell
2017	http://www.sciencedirect.com/science/article/pii/S0092867417307626 "Gut microbes influence life expectancy" Elife
2017	https://elifesciences.org/for-the-press/779a3695/gut-microbes-influence-life-expectancy
2017	"Gut microbes from younger killifish extend life in older killifish" Medium https://medium.com/beautyinaging/gut-microbes-from-younger-killifish-extend-life-in-older-killifish-9aafe1c15cf5
2017	"Young guts make elderly fish sprightly" Nature
2018	https://www.nature.com/articles/d41586-017-02936-1 "Gut microbes as a novel anti-aging intervention?" The Science Breaker
	https://thesciencebreaker.org/breaks/microbiology/gut-microbes-as-a-novel-anti-
2040	aging-intervention
2019	"Neutral Evolution shapes lifespan and ageing" https://www.mpg.de/13660866/0702-balt-110438-neutral-evolution-shapes-lifespan-
2019	and-ageing Der Killifisch und die Falten meines Vater
2010	https://www.arte.tv/de/videos/086132-008-A/verknuepft/
2019	"Die genetische Last des Killifisches"
2019	https://www.laborjournal.de/editorials/1861.php "Will he be 130?" Nov 22, Spiegel Online
2019	"vviii ne be 130: 140v 22, Spiegei Oniine
Teaching	

<u>Teaching</u>	
2003	Undergraduate orientation school. Scuola Normale Superiore di Pisa, San Miniato Pisa, Italy.
2008	Undergraduate course "Longevity", Stanford University, USA.
2009	Undergraduate course "Longevity", Stanford University, USA.
2015	Graduate course "Genomics for the Neurosciences". Scuola Normale Superiore di Pisa, Italy.
2015	Master module "Functional Genomics". University of Cologne, Cologne, Germany.
2016	Graduate course "Neurogenomics". Scuola Normale Superiore di Pisa, Pisa, Italy.
2016	Master module "Population Genetics". University of Cologne, Cologne, Germany.
2016	Undergraduate course "Evolutionary Biology". Scuola Normale Superiore, Pisa, Italy.
2016	Master module "Functional Genomics". University of Cologne, Cologne, Germany.
2017	Master module "Population Genetics". University of Cologne, Cologne, Germany.
2018	Master module "Functional Genomics". University of Cologne, Cologne, Germany.
2018	Master module "Population Genetics". University of Cologne, Cologne, Germany.
2018	Module "Analysis of the Microbiome and Quantitative Genetics" for the PhD course "Neurogenomics". Scuola Normale Superiore, Pisa, Italy.
2018	"Stochastic models in DNA sequence evolution" (SS 2018), University of Cologne, Institute of Mathematics (with Professor Alexader Drewitz).
2018	PhD Summer School on "Aging and the Microbiome", Old Herborn University, Herborn, Germany.
2018	"Comparative and Experimental Approaches in Aging Biology Research, An Applied Laboratory in Aging Research Models" for undergraduates and PhD students. MDI Biological Laboratory, Bar Harbor, Maine, United States.
2018	CECAD Summer School, CECAD, University of Cologne, Cologne, Germany.
2018	"Forever young" – Frontiers in Aging Research. Lecture series of the IPMM/IPHS graduate program on Molecular Medicine, Cologne, Germany.

2019 2019	Master module "Functional Genomics". University of Cologne, Cologne, Germany.  Master module "Population Genetics". University of Cologne, Cologne, Germany.
2019	Module "Analysis of the Microbiome" for the PhD course "Neurogenomics", Scuola Normale Superiore, Pisa, Italy.
2020	"Evolutionary biology of Aging", Cologne Graduate School on Aging, Cologne, Germany.
2020	Cologne Graduate School on Aging Summer School, Cologne, Germany.
2021	"Genetics, Genomics, and Cell Biology of Aging", Princeton University, US.
2021	"Population Genetics and Molecular Evolution", University of Cologne, Germany.
2022	"Alterung und Krankheitsentstehung: Intestinal stem cells and microbiome in aging", Friedrich Schiller University, Jena, Germany.