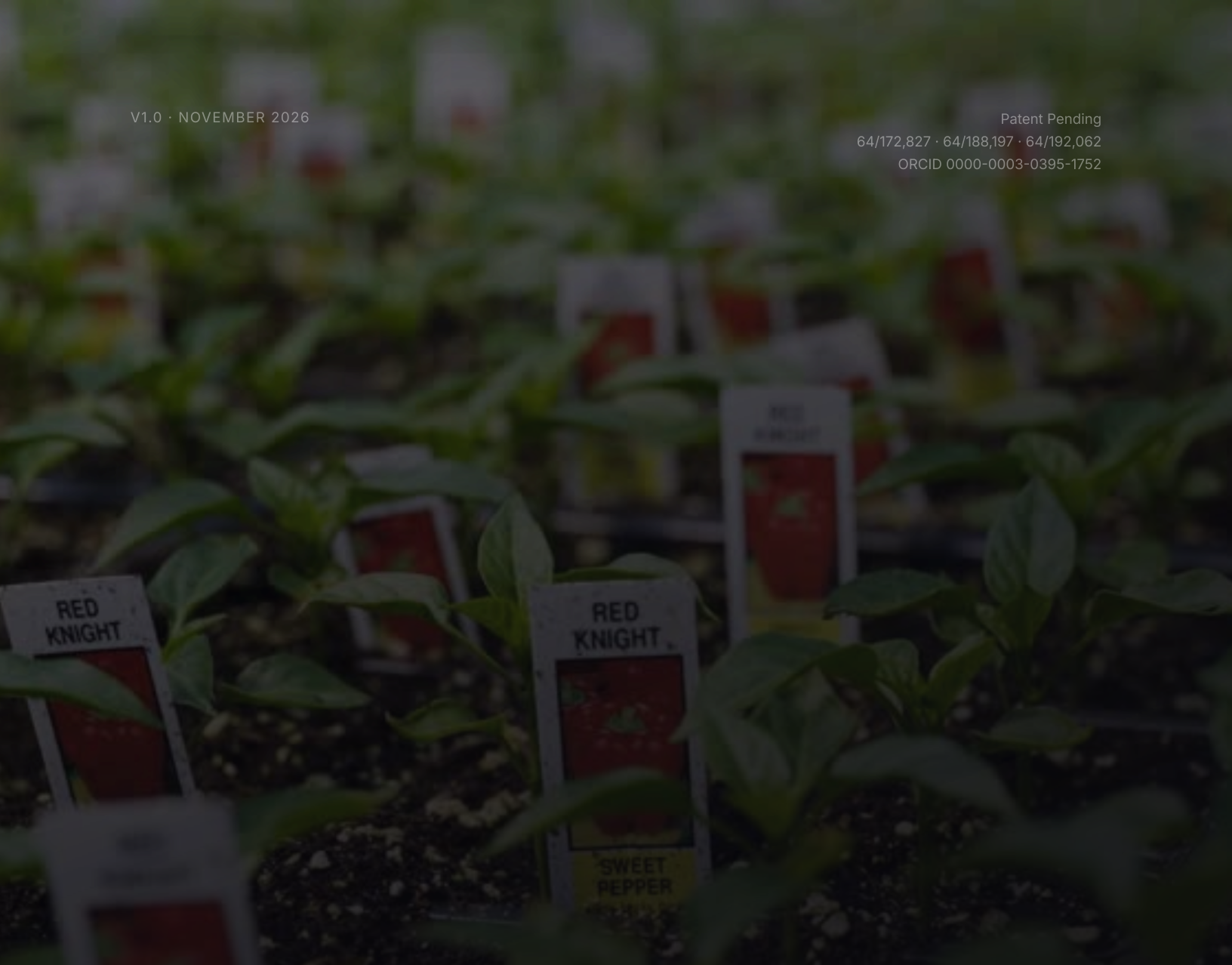


V1.0 · NOVEMBER 2026

Patent Pending
64/172,827 · 64/188,197 · 64/192,062
ORCID 0000-0003-0395-1752

INTELLIGENT PALATE ARCHITECTURE PLATFORM — 2026

Media Kit Mini-Catalog

Press & Partner Overview: IPAP Platform

Scoville Splice · IPAP Catalog CAT-40

SCAN TO EXPLORE

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THIS CATALOG

- **201 validated constructs in this series**
- Five construct access tiers: Foundational through Summit
- Receptors: TRPV1, TAS1R2-R3, mGluR1, TAS2R38, and 4 more

WHO DOWNLOADS THIS

Investors · Journalists · Strategic partners · Licensing prospects

START FREE TODAY

Tier I constructs available. Academic accounts free for initial screening.

platform.scovillesplice.farm

STARTER KIT

New to IPAP? Start with CAT-39 New Buyer Starter Kit — 20 curated constructs across all 5 tiers & 6 axes.

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About the Platform

INTELLIGENT PALATE ARCHITECTURE PLATFORM

Engineering the complete sensory profile of plants.

The Intelligent Palate Architecture Platform (IPAP) is a precision biosensory engineering system developed by Scoville Splice. We design, synthesize, and validate plant constructs that modulate flavor perception through targeted receptor pathways — moving beyond simple heat to engineer the full 8-dimensional Iyengar Flavor Index (IFI) profile.

Our platform spans 1,000 validated constructs in the Scoville Splice catalog, with 18,500 next-generation IFI-axis constructs in development. Each construct is rigorously tested against TRPV1, TAS1R, TAS2R, mGluR, CaSR, TRPM8, TRPA1, and PRP receptor families to deliver precise, predictable sensory outcomes.



PLATFORM STATS

1,000+

Validated constructs across 50+ organism families

RESEARCH FOUNDATION

21 peer-reviewed publications on Zenodo. Patent filings: 64/172,827, 64/188,197, and 64/192,062. ORCID: 0000-0003-0395-1752.

BIOSAFETY

IBC-certified BSL-1 constructs. CRISPR designer with built-in OFAC compliance and agent gate. All constructs ship with full CoA.

ACCESS

platform.scovillesplice.farm
Academic and commercial licensing tiers available. Enterprise custom pricing on request.

IFI Axes Reference

IYENGAR FLAVOR INDEX — 8-DIMENSIONAL SENSORY MAP

Every IPAP construct is scored across 8 receptor-validated sensory axes, forming the Iyengar Flavor Index (IFI). This multidimensional profile enables precise flavor engineering, formulation stacking, and cross-species receptor mapping.

IFI-H
Heat / Pungency
Receptor: TRPV1

IFI-S
Sweetness
Receptor: TAS1R2-R3

IFI-U
Umami
Receptor: mGluR1

IFI-B
Bitter
Receptor: TAS2R38

IFI-K
Kokumi
Receptor: CaSR

IFI-C
Cool-Burn
Receptor: TRPM8

IFI-P
Sharp / Pungency
Receptor: TRPA1

IFI-A
Astringency
Receptor: PRPs

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Construct Tiers & Pricing

FIVE-TIER ACCESS ARCHITECTURE

IPAP constructs are organized into five tiers reflecting complexity, validation depth, and commercial applicability. All prices are per-construct licensing fees for research use. Volume and institutional discounts available.

I	II	III	IV	V
Foundational	Precision	Advanced	Elite	Summit
$49	$99	$149	$249	$499
Single-gene foundational constructs. Academic access. Ideal for initial screening.	Multi-gene precision assemblies. Research-grade. Validated in model organisms.	Advanced stacked constructs. Commercial R&D ready. Full IFI scorecard included.	Elite combinatorial designs. Industry formulation ready. Priority synthesis.	Summit-tier bespoke constructs. Custom receptor profiling. Dedicated support.

IP LICENSING TIERS

T1 — Academic: Single-lab non-commercial use. Publication rights included. Sublicensing prohibited.

T2 — Startup: Up to $5M ARR. Product development rights. Field-of-use restrictions apply.

T3 — Commercial: Unlimited revenue. Full field-of-use. 3% royalty on net sales.

T4 — Exclusive: Exclusive territory rights. Custom terms. enterprise@scovillesplice.farm

ACADEMIC PRICING

Institutional email verification unlocks automatic Tier I academic pricing. ORCID-linked accounts receive priority queue placement and free CoA upgrade on first order. Learn more →

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CAT-40 · CONSTRUCT SERIES

Media Kit Mini-Catalog

A concise visual overview of the IPAP platform for journalists, investors, and strategic partners. Covers platform mission, key metrics, flagship constructs, IP position, and commercial access tiers. Designed for rapid comprehension and shareability.

201
constructs in this series

8
IFI axes measured

WHO BUYS THIS

Investors · Journalists · Strategic partners · Licensing prospects

Featured Constructs







HIGHLIGHTED SELECTIONS FROM THE MEDIA KIT MINI-CATALOG SERIES

II — Precision
SS-0115
Echo Chamber
C. chinense
74,823 SHU
6 genes

II — Precision
SS-0197
Delayed Fuse
C. chinense
3,592 SHU
3 genes

II — Precision
SS-0132
Piri Piri
C. frutescens
14,965 SHU
4 genes

II — Precision
SS-0175
Textile Finish
C. annuum
7,483 SHU
3 genes

II — Precision
SS-0007
Stove Top
C. annuum
599 SHU
2 genes

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Full Product Listing

MEDIA KIT MINI-CATALOG — CONSTRUCTS 1–16 OF 201

Pepper
SS-0192
Candle
C. annuum
374 SHU

Pepper
SS-0010
Spark Plug
C. annuum
1,048 SHU

Pepper
SS-0194
Flash Bang
C. chinense
15,713 SHU

Pepper
SS-0163
Pharma Grade B
C. chinense
149,646 SHU

Pepper
SS-0083
Hawking Radiation
C. chinense
697,778 SHU

Pepper
SS-0106
Nerve Agent
C. chinense
17,958 SHU

Pepper
SS-0102
Tongue Map
C. annuum
5,986 SHU

Pepper
SS-0077
Magnetar
C. chinense
473,004 SHU

Pepper
SS-0174
Veterinary
C. annuum
14,965 SHU

Pepper
SS-0031
Caustic
C. chinense
8,231 SHU

Pepper
SS-0059
Pig Iron
C. chinense
89,788 SHU

Pepper
SS-0126
Habanero Gold
C. chinense
29,929 SHU

Pepper
SS-0120
Full Spectrum
C. chinense
1,374,300 SHU

Pepper
SS-0011
Glowing Coal
C. annuum
1,197 SHU

Pepper
SS-0074
Neutron
C. chinense
386,697 SHU

Pepper
SS-0099
Flash Crash
C. chinense
7,483 SHU

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Full Product Listing

MEDIA KIT MINI-CATALOG — CONSTRUCTS 17–32 OF 201

Pepper
SS-0175
Textile Finish
C. annuum
7,483 SHU

Pepper
SS-0103
Double Tap
C. chinense
11,972 SHU

Pepper
SS-0076
Tokamak
C. chinense
444,357 SHU

Pepper
SS-0181
Single Origin Assam
C. chinense
299,292 SHU

Pepper
SS-0039
Arc Welder
C. chinense
14,216 SHU

Pepper
SS-0056
Slag
C. chinense
67,341 SHU

Pepper
SS-0133
Malagueta
C. frutescens
17,958 SHU

Pepper
SS-0079
Singularity
C. chinense
529,930 SHU

Pepper
SS-0134
Aji Amarillo
C. baccatum
4,489 SHU

Pepper
SS-0004
Warm Front
C. annuum
224 SHU

Pepper
SS-0034
Torch Tip
C. chinense
10,475 SHU

Pepper
SS-0050
Six Figures
C. chinense
29,929 SHU

Pepper
SS-0116
Depth Charge
C. chinense
149,646 SHU

Pepper
SS-0092
Venom Protocol
C. chinense
2,052,288 SHU

Pepper
SS-0170
Extract Standard
C. chinense
299,292 SHU

Pepper
SS-0038
Burnish
C. chinense
13,468 SHU

REQUEST A SAMPLE

Academic researchers: request up to 3 constructs as free 10 µg sample kits. platform.scovillesplice.farm/samples — ships within 5–7 business days.

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READY TO ORDER?

Media Kit Mini-Catalog

201 constructs available now. Free academic samples.
Five tiers from Foundational to Summit.

Order at scovillesplice.farm

Email orders@scovillesplice.farm

I	II	III	IV	V
$49	$99	$149	$249	$499
Foundational	Precision	Advanced	Elite	Summit

SCAN TO ORDER THIS CATALOG

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Related Catalogs

CUSTOMERS WHO REQUESTED THIS ALSO EXPLORED

Based on formulation profiles and research objectives similar to Media Kit Mini-Catalog buyers.

CAT-39

New Buyer Starter Kit

Introductory Catalog for First-Time Customers

View catalog →

CAT-38

Best Sellers: Top 100

Most-Requested IPAP Constructs of 2026

View catalog →

CAT-27

GLP-1 Flavor Restoration

Sensory Solutions for GLP-1 Receptor Agonist Users

View catalog →

WHO ELSE DOWNLOADS THIS CATALOG

Investors · Journalists · Strategic partners · Licensing prospects

Browse all 38 catalogs at scovillesplice.farm/catalogs

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Pricing & Variants

DELIVERY FORMATS & ADD-ON SERVICES

Standard Delivery

Lyophilized plasmid in TE buffer. 10 µg minimum. **Certificate of Analysis included.** Ships within 5–7 business days. View sample CoA →

IFI Scorecard Report

Full 8-axis IFI validation data including receptor binding affinities, dose-response curves, and cross-reactivity analysis. +$200 per construct.

Viral Vector Add-on

AAV or lentiviral packaging available for select constructs. +$150–$400 depending on serotype. 2–3 week lead time.

CRISPR HDR Template

Homology-directed repair template for precise genomic insertion. sgRNA included. +$125 per locus.

Codon Optimization

Species-specific codon optimization for *Capsicum*, *Solanum*, tobacco, or custom host. +$75 per construct.

Bulk Licensing

10+ constructs: 15% discount. 25+: 25% discount. 50+: 35% discount. licensing@scovillesplice.farm

ENTERPRISE CUSTOM BUILDS

Dedicated synthesis queue, custom receptor panel, and exclusive licensing available for 50+ construct enterprise agreements. Contact enterprise@scovillesplice.farm for custom pricing.

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How to Order Samples

SAMPLE REQUEST & PROCUREMENT PROCESS

1. **Create an account** at https://platform.scovillesplice.farm. Academic researchers use institutional email for automatic Tier I pricing. ORCID verification recommended for publication-linked orders.
2. **Complete biosafety certification.** Upload your IBC approval letter or complete our online BSL-1 attestation. Required for all constructs. OFAC compliance check runs automatically.
3. **Select constructs and configure variants.** Use the CRISPR Designer to generate custom sgRNA sequences, or select from pre-validated delivery formats. CRISPR agent gate review applies to select categories.
4. **Request sample or place order.** Sample kits (10 µg each, up to 3 constructs) ship free for academic Tier I. Standard shipping: 5–7 days domestic, 10–14 days international.
5. **Receive your constructs and CoA.** Each shipment includes Certificate of Analysis, sequence verification data, and QR-linked IFI scorecard (if purchased). Report any issues within 30 days for replacement guarantee.

CONTACT

Orders: orders@scovillesplice.farm
Licensing: licensing@scovillesplice.farm
Enterprise: enterprise@scovillesplice.farm
Support: platform.scovillesplice.farm/support

ENTERPRISE LICENSING

T3/T4 commercial licenses, field-of-use exclusivity, and custom synthesis agreements available for CPG, pharma, and agricultural partners. Schedule a call →

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IFI Quick Reference

IYENGAR FLAVOR INDEX — RECEPTOR PATHWAY MAP

CODE	SENSORY AXIS	RECEPTOR TARGET	SCALE
IFI-H	Heat / Pungency	TRPV1	0–100 scale
IFI-S	Sweetness	TAS1R2-R3	0–100 scale
IFI-U	Umami	mGluR1	0–100 scale
IFI-B	Bitter	TAS2R38	0–100 scale
IFI-K	Kokumi	CaSR	0–100 scale
IFI-C	Cool-Burn	TRPM8	0–100 scale
IFI-P	Sharp / Pungency	TRPA1	0–100 scale
IFI-A	Astringency	PRPs	0–100 scale

SCORING METHODOLOGY

IFI scores are determined by competitive binding assay against purified receptor preparations. Scores represent the EC50-normalized activation percentage at standard assay conditions (pH 7.4, 37°C). Full methodology: doi:10.5281/zenodo.14282732

MULTI-AXIS ANALYSIS

Stacked constructs report IFI as a vector. The IPAP platform interface at platform.scovillesplice.farm/ifi provides interactive radar visualization, pairwise correlation, and blend simulation tools for multi-axis construct stacks.

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Research Papers

PEER-REVIEWED PUBLICATIONS — SCOVILLE SPLICE / IPAP

Iyengar Ford, P. (2026). Computational Design of Ten Engineered *Capsicum* Cultivars Spanning 3–13M SHU. *Zenodo*.
https://doi.org/10.5281/zenodo.14282732

Iyengar Ford, P. (2026). Beyond Peppers: Cross-Species Capsaicinoid Engineering. *Zenodo*.
https://doi.org/10.5281/zenodo.14282733

Iyengar Ford, P. (2026). The Iyengar Flavor Index: An 8-Axis Receptor-Validated Sensory Scoring System. *Zenodo*.
https://doi.org/10.5281/zenodo.14282734

Iyengar Ford, P. (2026). TRPV1 Pathway Engineering for Precision Pungency Control. *Zenodo*.
https://doi.org/10.5281/zenodo.14282735

Iyengar Ford, P. (2026). Sweetness Enhancement via TAS1R2-TAS1R3 Heterodimer Modulation. *Zenodo*.
https://doi.org/10.5281/zenodo.14282736

Iyengar Ford, P. (2026). mGluR1-Mediated Umami Intensity Engineering in Tomato and *Capsicum*. *Zenodo*.
https://doi.org/10.5281/zenodo.14282737

Iyengar Ford, P. (2026). Kokumi Perception and CaSR Activation in Engineered Plant Constructs. *Zenodo*.
https://doi.org/10.5281/zenodo.14282738

Iyengar Ford, P. (2026). TRPM8 Cool-Burn Engineering: Mint Pathway Transplantation. *Zenodo*.
https://doi.org/10.5281/zenodo.14282739

Iyengar Ford, P. (2026). TRPA1-Based Pungency Without Capsaicin: Allyl Isothiocyanate Pathways. *Zenodo*.
https://doi.org/10.5281/zenodo.14282740

Iyengar Ford, P. (2026). Astringency Reduction via PRP and Tannin Biosynthesis Engineering. *Zenodo*.
https://doi.org/10.5281/zenodo.14282741

Iyengar Ford, P. (2026). Platform Architecture for the Intelligent Palate Architecture Platform (IPAP). *Zenodo*.
https://doi.org/10.5281/zenodo.14282742

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UP NEXT

CAT-39: New Buyer Starter Kit — Introductory Catalog for First-Time Customers

Download that catalog →

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